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SOME FINE STEERS.

For the past nineteen months the State Agricultural College has been feeding as an experiment nine steers, comprising two Galloways, two Herefords, two Holsteins, one Shorthorn, one Devon, and a cross-bred Hereford and Galloway. Professor Davenport, of the agricultural department of the College, made arrangements with the Michigan Beef and Provision Co. to have these cattle shipped to Detroit and slaughtered. The cattle arrived here on Monday and were slaughtered last Wednesday in the presence of a large gathering of butchers and interested citizens. Prof. Davenport and his assistant, Mr. C. S. Burnett, had charge of the details, and will soon issue a bulletin which will give considerable more technical information than we have space for at present. The cattle were off feed and water for 24 hours before being weighed, previous to slaughtering.

The first animal slaughtered was the Galloway "Jumbo" bred by Mr. R. B. Cross, of St. Johns. He was 29 months old, very smooth, and weighed 1,350 pounds. The carcass weighed 797 pounds, showing nearly 64 per cent of beef to the gross weight.

The next animal was "Colby," another Galloway steer bred by J. L. Weeks & Co., of Colby. This steer was 29 months and 10 days old. His weight was 1,580 pounds, and he produced a carcass weighing 995 pounds, a slight fraction over 63 per cent.

Number three was the cross-bred Galloway and Hereford steer "Horace," bred at the College. His age was twenty-nine months and weight 1,370 pounds. The carcass weighed 877 pounds, a percentage of a fraction over 64.

"Walton," a Holstein steer bred by M. L. Sweet, of Grand Rapids, 31 months and 10 days old, weighing 1,540 pounds, was the next one led in. His carcass weighed 949 pounds, giving a percentage of nearly 63.

This steer was followed by "Nick," the other Holstein, 30 months old, bred at the College and weighing 1,530 pounds. He gave a carcass weighing 955 pounds, a percentage of over 64.

Merrill & Fifeled, of Bay City, bred "Milton," the first of the Herefords. His age was 33 months and weight 1,500 pounds. The carcass weighed 1,073 pounds, showing a percentage over 67 1/2.

The next was the Hereford "Boy" bred on the Crapo farm near Flint. He was 36 months and 15 days old and weighed 1,330 pounds. The carcass weighed 842 pounds, a percentage of over 63.

"Barrington," the Shorthorn steer, was bred by Wm. Curll & Sons of Addison. He was 26 months old and weighed 1,470 pounds. The carcass produced weighed 971 pounds, a percentage over 66.

The last was the Devon steer "Disco," bred by W. S. Walker, of Rochester. His age was 24 months and weight 1,140 lbs. The carcass weighed 712 pounds, being a percentage of over 62.

When the animals were hung up, there was a string of beef that would be hard to beat in any place in the country. There was only one animal in the lot that had the appearance of being over fed, and that was the Hereford steer "Milton." He was just the over-ripe and had begun to show some patches. We should think that six months ago, under the feeding that these cattle were receiving, he must have been a model animal.

A committee of five was appointed to judge the carcasses, the point to decide being the selection of the most profitable one for the butcher. Two of the committee were practical butchers, and the other three were prize men or less interested in the cattle business. The butchers at once selected the Devon as their choice for first, the cross-bred for second, "Milton" for third, and the Shorthorn for fourth. The Hereford, they claimed, would waste in cutting up, and the Shorthorn was a little light in the loin. After a long argument pro and con, and the time getting along towards 7 o'clock in the evening, they agreed to the following: Milton, first; Disco, second; Horace, third; Barrington, fourth; Colby, fifth; Nick, sixth; Jumbo, seventh; Boy, eighth; Walton, ninth.

The sweetest, tenderest, and most palatable mutton is raised in Ireland. The Irish sheep grow larger than ours, they feed on better pastures, and their meat is wholly free from that strong, "sheepy" taste which makes ours disagreeable to many palates. No American who has eaten the mutton served in the Irish hotels will take any other kind of meat while he stays there. The English mutton, though better than ours, is far inferior to the Irish. American mutton is sold in the English, Irish and Scotch markets, but it brings from three to four pence less a pound than the native products, and no one who can afford the latter will take the former.--Boston Globe.

The Globe is in error. Welsh mutton is regarded by English epicures as the finest obtainable. It is grown on a small black-faced sheep which is pastured on the Welsh mountains, and the high flavor of its flesh is attributed to the sweet herbage and the aromatic wild plants it feeds upon. It is also safe to say that well cooked American mutton is entirely free from any "sheepy" taste. This "sheepy" taste chestnut was set afloat by some Anglo-American, who naturally turned up his nose at anything American, and others have accepted the story without investigation. The taste of these English loving duds has never yet been able to detect the difference between good American mutton, well cooked, and any other.



C. S. Bingham, Vernon, Mich., Importer and Breeder of Shropshire Sheep.

RAMBOUILLETT SHEEP.

Mr. Thos. Wyckoff, one of the Board of the American Rambouillet Sheep Breeders' Association, writes in reply to what was said in last FARMER regarding this branch of the Merino family. We quote a few paragraphs so our readers can know what is claimed for the breed by those who are interested in it. Mr. Wyckoff says:

"I read with interest your article in last FARMER. We do not advertise these sheep because we cannot supply 100th part of the demand on us for them. I send you a sample of wool from a ram's fleece of just a year's growth. Examine under a powerful glass and compare with the 'gun Merino,' and if you have made an error as to fineness please correct your statement."

"The Rambouillet Merino is the only sheep I know of that produces a fine combing wool."

"S. L. Wills, Director of the Rambouillet Field at Paris, writes me that these sheep took the two grand medals of honor, the highest degree recommended, at the Exposition closed in 1889."

"Baron Von Hommer, of Pomerania, Prussia, took the highest honors at Buenos Ayres in April this year (1890), and after the Exposition closed sold ten rams for \$1,000 each in Buenos Ayres currency, at public sale. Please make these statements public."

The sample of wool sent by Mr. Wyckoff has a length of staple of 2 1/2 inches, well crimped, but colored, rather dry, and very fine. We know we can duplicate it for length of staple, and beauty of style in a dozen flocks we have examined within the past six months. The very point Mr. Wyckoff thinks an advantage, dryness and freedom from oil, would make us afraid to use the animal which grew it upon a light shearing flock. Mr. Wyckoff has very erroneous impressions as to fine combing wool. Thousands of pounds of it are sold every week in the eastern markets. Anything is a combing wool now with two and a half inch staple. This State produces a great deal of it. A fine delaine is a fine combing wool, and Mr. Wyckoff can find hundreds of flocks in Michigan which produce fleeces grading 50 per cent delaine. What in the world would we have done for fine combing wool in the past ten years if the French Merino were the only sheep which would grow it? We never import French wools to any extent, for France is a heavy importer of Australian and Buenos Ayres wools herself.

As to the prices paid in Buenos Ayres, we would only request Mr. Wyckoff to read the report of sale of American Merinos--many of them Michigan bred--in the greatest wool-growing country in the world, Australia, and by the shrewdest stock masters. They were paid for in good sterling money, not in funds at a heavy discount.

We have no quarrel with the Rambouillet Merino, however. Quite the contrary. We would like to see a thousand farms in this State now bare of sheep covered with them. They would be an efficient aid against fallow and debt, and we believe every good breed of sheep will prove if given care and attention. But we shall always believe, until facts convince us otherwise, that among the average farmers of this State the American Merino, bred as it has been to meet their requirements, will find more general favor than any other breed.

We did not have time to prepare a report of the Shawanese County Fair, held at Owosso on Wednesday, Thursday and Friday of this week. It will appear in our next issue. We may remark, however, that it was the finest fair held in that county for years.

A SAGINAW FARM.

The Saginaw Courier-Herald gives a description of the farm of Mr. A. T. Bites, of Saginaw, where a meeting of the Saginaw County Farmers' Club was held the past week. As the manager of this farm is a Shawanese County boy, where his father still resides, and is a well known farmer and stock breeder, we give some extracts from the Courier-Herald's description. Mr. C. S. Baldwin, the manager, was for some years at the Mound Springs Stock Farm of J. W. Hibbard, and from there went to take charge of the Bites farm. He is a good sportsman of the intelligent young Michigan farmer--enterprising, persevering, and wide awake. We are pleased to note his success in managing a farm of the extent and with the amount of stock which that of Mr. Bites carries. The Courier-Herald says:

"This stock farm contains 800 acres, 550 of which are cleared and divided into 40 acre fields. The land is level, very rich in its productive qualities, and is considered as good a farm as Saginaw County contains. This season there were threshed a total of 3,000 bushels of grain--114 bushels of wheat and the balance in barley and oats. No better stock can be found in the county than is confined within the fences of this mammoth farm, and no farm in the county is better equipped and adapted for raising good stock. Here is the home of that celebrated imported Cyrenaide steed, Top Star, 1,750 pounds. On the farm are 75 Shorthorn cattle and 60 horses and colts, 23 colts being born this season. At the coming Northeastern Fair a three-week-old colt and a yearling bull from this farm will be exhibited that will go home decorated with blue ribbons. Among the attractions on this farm, and the pride of Mr. Bites, is a little bay pony that is used in running errands, and more especially in going after and bringing home the large herd of cattle. In this way the pony has a great head; he will bite, strike, and chase the cattle until every one is housed. Four wild mules furnish water for domestic use and for the stock. Five grain barns are fitted to the roof and the large stock barns are built with a view to comfort for the stock and handiness to the herders. The creamery is packed overhead and on three sides with ice, and is a model of convenience and neatness in its construction. A young orchard of about 100 trees is in a prosperous condition. C. S. Baldwin is the manager of the farm, and his good wife is manager of the house, both of whom are the right people for the places they so faithfully fill."

In referring to the meeting of the Club, and its proceedings, the paper says:

"The members of the club present requested The Courier-Herald to urge farmers to turn out and make the coming fair of the Northeastern Agricultural Society a success. Every individual farmer should take an active interest in the fair. Exhibit your stock, cereals and fruits there. Come prepared to stay and make the meeting one of pleasure and profit to yourself, your family and your neighbors. Visit, exchange views on farming and stock raising, and doing thus you make a success of the event."

We can endorse what the Courier-Herald says regarding the Northeastern Fair. It is doing a good work for that section, and should have the support of the farming community as well as the business men of the Valley. Farmers cannot be surpassed as educators, not only of the farmers, but also of the inhabitants of towns and villages. They spread information imperceptibly, and a man must be dull indeed who can attend one and not gather new ideas and acquire a variety of useful information.

A NUMBER of our State exchanges report a greater area being sowed to wheat this fall, and that the seed is being put in earlier than usual.

EVERGREEN PLACE STOCK FARM.

This week we give a very good likeness of Mr. C. S. Bingham, of Evergreen Place Stock Farm, Vernon, Mich. He is probably as well known to breeders of Shropshires as any man in the State, and has certainly worked up a big business in this popular breed of sheep. Mr. Bingham, as usual for some years, has brought over a bunch of Shropshires this season from England, selected by himself, a selection from which he had on exhibition at the State Fair last week. These sheep were imported from the following flocks: Two yearling rams from the flock of J. Bowen Jones, President of the Shropshire Association in England; eight yearling rams from the flock of Wm. Nevett, of Yorton, Shropshire, Eng.; four yearling rams from Geo. Blatner, of Shrewsbury; one yearling ram of Wm. Brown, of XI Towns; one ram lamb of Wm. Thomas, of Beam House--this lamb was the winner of a 25 premium in a 54 exhibit contest at the Royal Stourbridge Fair, in June, 1890, three ram lambs of Thomas Davis, of Littlemore; four yearling ewes from J. Bowen Jones' flock; fifty yearling ewes from the flock of J. H. Jones, of Brompton; twenty yearling ewes of Wm. Nevett, of Yorton; three yearling ewes of Thos. Cartright, from a pen of five that won a premium at the June Show in a contest of five hundred Shropshires against comers of all other breeds taken together, of which there were seventy-five of all other breeds placed on exhibition. These are the complete list of Mr. Bingham's importations for 1890. Beside these he has ninety ram lambs, seventy ewe lambs, and fifteen yearling rams, of his own breeding, and ninety imported and Canadian bred ewes. Mr. Bingham has been very successful in his business as an importer of Shropshires, and sheep from his flock have found their way into the best flocks of the West as far as the Pacific Coast. In this State the flocks at the State Agricultural College, and at James M. Turner's Springdale Farm, have stock imported by Mr. Bingham. He has fitted up Evergreen Place with convenient, comfortable and very commodious buildings. The root cellar is one of the best we have ever seen; its dimensions are 12x45x10 feet in depth; the barn in which his snow stock is kept is undoubtedly the finest finished sheep barn in the State. Its size is 22x60 feet; it is finished in ash with hard oil finish. Another sheep barn is 20x60, and still another 44x100 ft. The other farm buildings are in keeping with those spoken of. Certainly the Shropshire has done well for Mr. Bingham, as it has for hundreds of others in this State, and is therefore entitled to the best care and pleasant surroundings at his hands.

For the Michigan Farmer.

THE LIBERTY FARMERS' CLUB.

The September meeting of the Liberty Farmers' Club was held at "Log Cabin Farm," the home of Mr. and Mrs. R. D. M. Edwards, on the 6th inst.

A lively interest was had in the discussion. "Would it be an advantage to the nation for women to vote?" Mrs. Byron Hill opened the discussion. Mrs. Hill said: To this question I would answer yes, because it is fair and right that those who obey the laws should have a voice in making them; and that those who pay taxes should have a voice as to the amount of the tax and the way in which it shall be spent. Harriet Beecher Stowe says: "I think the State can no more afford to dispense with the aid of woman in its affairs than the family." It would elevate and broaden women's minds to take part of the spare time which they now spend on fancy work, crazy quilts, etc., and devote it to the study of public questions. It would make them more intelligent companions for their husbands, broader minded mothers for their children. In Wyoming, soon after the passage of the woman suffrage law, a man was elected who was popular with his party but who was a drinker. After his election he grew more careless, went into saloons openly, and was several times seen in the street worse for liquor. The politicians of his party did not care, and when his time was out they re-nominated him. A man came home from the caucus and his wife asked him who the candidate was. He told her. She said, "He must not be elected." She put on her sunbonnet, went out and talked with the woman next door over the fence; the woman next door then put on her sunbonnet, went out and talked with her next neighbor; and so they passed the word all through the town. The women held no caucus, made no public demonstration, but when election day came the candidate found himself defeated and could not understand his defeat until one of the ladies told him. She said: "We could not let you go back, you were setting a bad example to our boys."

We read in holy writ that sin is a reproach to any people, but righteousness exalteth a nation. I think no one will dispute me when I say that women are more susceptible to love, kindness and religion than men. Woman was created with a finer nature than man; and while he has to do with the more stern realities of life it is hers to stand by his side, and by the softening in-

fluences of her nature smooth off the roughness which is acquired by contact with a fallen and depraved race of mankind. The Creator never intended woman should take a back seat, but that she should be a helpmate, standing side by side through the journey of life. And now I would ask what was the great and persuasive argument that led our first mother to disobey her Creator? It was that she would gain wisdom and become like God, knowing good and evil. She gained the knowledge, but at what a cost! It cost all the suffering and sorrow that has been experienced as the result of the gratification of a selfish and depraved nature of mankind from that time down to the present. Now as we look over the world and see the vast amount of suffering, more especially in our large cities where multitudes are born and bred in sin and degradation, and as the multitudes increase they seem to sink deeper and deeper in the mire of pollution. While I view their condition my heart thrills with a ray of hope as I read week after week of what God is doing for this class of people in raising up gifted and talented women who are willing to sacrifice the ease of luxurious homes and society of loving friends to lift up the fallen and alleviate the sufferings that have come upon the race. As we look over the world we see a great army of these angels of mercy who are going out in the highways and hedges and compelling them to come in that the house may be filled.

Who does not blush to think of the corruption with which the capital of our great nation is reeking today! And now I would ask you, fathers, husbands and brothers, can you get along better without our help? Or would it be an advantage to give us the ballot and let us help in this great work of putting down evil and establishing a righteous government.

I can not bring out anything more forcibly than to give you a few extracts from a speech made by S. J. Turner before a convention in Boston some years ago, when the subject of women's rights first began to be agitated: "If the first woman that God ever made had power to turn the whole world upside down all herself alone, can't she set these women together turn it back and set it right side up again? And now they want to and the men better let 'em."

Mrs. J. D. Crispell--I think there are very few people who will not admit that women are fully man's equal in intelligence, and more than his equal in morality and sobriety. She is a citizen, and as such is taxed without being represented. Is taxation without representation more just for women than for men? Isn't it an advantage for a nation to be just? The law denying this right of suffrage to woman is a relic of the old English feudal law. Is it reasonable that a republican government, created by the people, for the people, should subject to the burdens and penalties of citizenship, have a God-given right to exercise it. I believe the mere presence of pure-minded women in the polls would have a great influence in restraining men from practices which are degrading in the extreme, both to those who indulge in them, and to those who allow such things. The polls are pictured to us as almost the worst place on the earth, and we are obliged to live with the men who make them so. Which is the more degrading, to go there and deposit our votes, or to live with such men? Even the vilest will withhold the impure jest when a woman he respects comes into his presence. What is any place where only men gather together? I fear if women had never gathered in our churches more than at the polls, even they would not be much better. Divine wisdom ordained that men and women should mingle together in all places, whether at home, in church or legislative halls. In God's providence every wrong reacts upon the wrong doer, and our whole social fabric is diseased almost unto death because woman's purifying influence has been absent from our politics. I think the ballot in the hands of women is the weapon which must eventually purify our nation.

Mrs. A. W. Dunn--Who gave men the right to say women shall not vote? I have always wondered why men who made the laws excluded them. Are they not equal to foreigners?

Mrs. M. E. Wetherby--In the beginning we were created equal. Woman was given to man for a companion and helpmate. They were to be co-laborers in life. Where man goes woman should go to share his sorrows and joys, and help in every way in this great drama of life. She has proved herself equal to the great trust reposed in her where she has been allowed the chance. In the halls of learning she keeps pace with her male competitors and in many cases is in advance. A truly great man redeems his pledges. Our constitution says all men are created free and equal. Will this nation still live upholding this lie? Woman has seen the black man given the ballot, she has worked to help him while she was excluded. Also foreigners who drink and make trouble in the country.

Mrs. Hill--I am told in Wyoming where women are allowed to vote it is as orderly as in a church.

Ell Shafer--I think if women went to the polls there would be as many drinking women as men. Think if you turned them out loose they would get to pulling hair. They were never intended by the

Almighty to be man's equal, or He would not have taken a rib from man to make woman.

Mrs. Wetherby--When something is taken from one and given to another, that one is ahead. We don't propose to pull hair. We propose to be ladies wherever we are. Woman was given this place by the Creator. She exerts her influence to the best of her knowledge. We are sowing seed to-day; as we sow we shall reap. Man can legislate to suit himself, and we are expected to obey those laws. Why are girls expected to obey the laws two years younger than men? The fruit is ripening; by and by the harvest will come when the ballot is in the hands of woman.

Mrs. Wm. Hutchins--I think nothing would be gained by women's voting. Can't we see where women are wronged. When men think it will be an advantage they will give them the ballot. Women are doing enough in rearing their sons. Can't we see where it would be better; it would only make more votes.

J. D. Crispell--This is quite an important point. The votes would be about as equally divided as now. I think their influence at home on the men more than all they can do at the polls.

Mrs. Hill--If any one doubts woman's executive ability, they should have been at the W. C. T. U. State Convention at Jackson.

Mrs. Hutchins--Don't try the wrong to legislation. If a man abuses his wife it is the fault of law? Let all shun the man who drinks. If a woman is married she must abide by it; she took him for better or worse. D. Speer--What causes these saloons but legislation? You can license any one to sell by legislation.

R. D. M. Edwards--I have not seen very bad things at the polls. The legislature has passed a law that no saloon shall be opened there. You will not find a place in the United States that is more pure. The ladies are now bound to be protected. If they go into a car they are given a seat. The moment you become voters your protection is gone. If you have the same voice you must stand the same chance. There are many places you could not sit at would not fill. I am willing women should vote, but if you do you must be prepared to fill all these places. It is a question whether you could do more good with your influence with suffrage than without it. Now your influence is your strong and high mission. If you vote we look upon that as your highest mission.

A. W. Dunn--I think women's wanting to vote the result of education. In olden times women were not expected to be educated with men. Only a few years ago how much obsequy was heaped upon a woman who was in the Medical College at Ann Arbor! I claim when women do vote the country will be better. Women want equal rights with men, not special.

President Shafer asked why woman would receive less protection because she had the right to vote. I think in a moral issue she would vote right every time. They are not wedded to these old parties.

Mrs. D. Speer--If men want to protect women why do they license saloons in our nation and all these little evils beside?

Mrs. Dunn--If the men give us the ballot we will protect ourselves.

Mrs. W. E. Kennedy--I will stand up all my life if they will let me protect my boy. We can use our influence while they are with us, but when they leave our homes we can't influence them so much. I think the good women would vote with the good women.

Mrs. Reed--Do the ladies think they are more capable of choosing a temperance candidate? What woman would wish to be a sheriff. Do you think they will ever be sheriff?

Mrs. Crispell thinks the men are so greedy for office women would not have a chance to be sheriff if they wished.

The subjects for discussion at the next meeting will be "Woman's Work," and "The Competitions and Combations of our Country."

At Journal to meet at the home of Mr. and Mrs. A. W. Dunn on the first Saturday in October. Mrs. J. D. Crispell, Club Reporter.

Washtenaw County Fair.

The coming fair to be held at Ann Arbor Sept. 30th to Oct. 3rd, promises to be one of the finest ever held at Ann Arbor. Some of the finest stock farms will be on exhibition. First class judges are secured, and everything possible to please exhibitors and visitors will be done. With a great additional expense, the Society has secured the exhibit of the Great Southern Bureau of Industry from North Carolina, which alone covers 1,000 square feet. With new grounds, new buildings, and electric railways running to the grounds, the society expects to accommodate and please all that come. One fare for the round trip to Ann Arbor each day of the fair on the T. A. & N. M. Ry.

THE potato crop in Ireland has suffered so severely from blight that it is the worst for many years. In fact so bad is it that a famine is feared, as many of the inhabitants rely upon this crop very largely for subsistence. It is believed that the British government will have to extend very liberal aid in many localities to prevent starvation among the peasantry.

MICHIGAN AHEAD.

Ohio has long been looked upon as one of the greatest agricultural States in the Union, while Michigan for years was derided as "old foggy," "behind the age," etc. The State Fairs of these two States should be something of an exhibit of the agricultural progress of each. By way of comparison we give the figures for the entries of live stock at each Fair the present season:

	Ohio.	Michigan.
Horses.....	514	591
Cattle.....	538	632
Sheep.....	361	634
Swine.....	346	553
Total.....	1,559	2,411

It will be seen that in every department Michigan was far ahead. More horses, nearly double as many cattle, more than double as many sheep and more than double the number of swine. Who says the farmers of Michigan are "old foggy?"

The Horse.

BREEDING CARRIAGE HORSES.

Mr. A. O. Fox, of Wisconsin, read an interesting paper on this subject, from which we take a few extracts. The methods suggested by Mr. Fox are worthy of attention, as there is no doubt the breeding of a class of horses suited for the carriage offers the greatest remuneration for the breeder, and in a direction where there is the least competition. Here are a few of Mr. Fox's ideas.

HOW TO PRODUCE COACHES.

With our close proximity to the largest and the best city markets and the facilities which we enjoy, we can breed and place upon the market this class of horses in such form and condition as to be beyond the reach of the western competition. How to produce them is the problem. We have had offered to us as sires, the American standard trotter, the imported French Coach, the Cleveland Bay and the English Coach. These are all valuable to us, but must be used with great care and judgment. I am disposed to believe that the produce of the Cleveland and English Coach will not be generally satisfactory except when out of dams strongly trotting bred, as the get will lack the speed required by the average American, and they will lack uniformity and will also be inclined to coarseness and soft feet. This is especially true of the English Coach.

THE CLEVELAND BAY.

As he is offered to us by the various importers, is certainly not highly enough bred and is lacking in quality. I have seen them with very heavy bodies, supported by far too light a set of limbs, cut away at the joints, and an indication of coarse hair on the ankles. I have seen a few of the grades and did not like them. I find my limited observation is backed by the experience of two very high authorities. The one is none other than the president of the Cleveland Bay society in England, in the address which is published in the *London Live Stock Journal*. My other authority is Stonehouse, one of the most celebrated English writers upon the horse, who treats of the Cleveland Bay in a chapter headed "Other Mixed Breeds." That the Cleveland possesses a large amount of English Cart blood is abundantly evident from perusal of some of their pedigrees.

THE FRENCH COACH.

I have seen but a very few grades got by French Coaches, and can scarcely express an opinion. The French Coaches are a product of the Arabian horse and the English thoroughbred and their get ought to be fine styled; but as to their gait, I believe they will not produce sufficient speed, though it is claimed that some of them trot in France. I also believe that the color of the get will not be sufficiently uniform to be satisfactory. I have noticed several imported French Coaches with very bad white markings; a great objection to carriage horses.

THE AMERICAN TROTTER.

While some of the American trotters are under size, yet I believe that up to the present time, they have given us the greatest number of our best carriage horses, and I believe that to the largest and best styled types of the standard American trotter we must look for our sires. So far as my personal observation has extended, the finest carriage horses I have ever seen were got by sons and grandsons of Mambrino Chief and out of dams of old Indian Chief or his son. Indian Chief was by Blood's Black Hawk, by Hill's Vermont. The dam of Indian Chief was by Ned Forrest, (not Edwin), by Young Bashaw, by imported Grand Bashaw.

Indian Chief's second dam was by Downing's Bay Messenger, the latter breeding through both sire and dam to imported Messenger.

The Kentucky Highlanders have also produced many fine carriage horses.

RESULTS BY CROSSING.

I have seen very excellent results produced by crossing large Mambrino and Hambletonian sires on dams of the more nearly extinct Morgan type, and mares from that branch of the English Coach family which relate to the celebrated Rainbow Rockingham stock. Rainbow Rockingham was a son of North Star, and I believed traced directly through to a thoroughbred. This English Coach cross has some objectionable features, however, among which is a tendency to feather about the limbs and the little coarseness and the feet none too good.

A HINT TO THE WISE.

It will be noticed that all these families run back not very remotely to the thoroughbred, from which fact we may gain a hint for our future benefit: provided always, that we select animals which have been properly toned down by the judicious admixture of the best American trotting blood, and of the largest families. It must be remembered that the thoroughbred is no longer a very small horse. Many of our best thoroughbreds are large enough. I have seen imported animals weighing 1,300 to 1,350 pounds. I think imported London will weigh over 1,300 pounds. But we do not need to go so far for what we require, since the very blood and characteristics we desire are embodied in some of our best American trotting families. We may, therefore, select such standard trotting bred sires as approach nearest to our ideal of the carriage horse, and which have shown their ability to impart to their offspring the required characteristic of size, style, color and soundness.

Don't Put a Horse on the Track.

The following from the eastern correspondent of the *Chicago Horseman* shows how little chance the owner of a horse has to make any money on him on the track unless he "stands in" with the gang:

Saturday last a group of would-be turf reformers sat on the club-house veranda at Fieswood, and one of them said: "The judges at many meetings are to blame for not enforcing the rule as to helping. It has got to this pass, in many a race where two horses out of the field are closely matched, a handy one or more of the fielders, not fast enough to win, can be induced by promise of division or special sum to help one of the star performers and hinder the other, so that a fair contest cannot be had. The driver of the winner of course denies collusion and says that he had nothing to do with Mr. Skipjack pulling in the way of Mr. Steadygoer, while Skipjack himself, with a deprecating, could not help it, will try to

make Steadygoer believe he is not 'in' with the other side in pools or purse."

"That is the chief reason why I quit the trotters," spoke up Pete Weber, who has of late years succeeded well in training Vendetta, by Sensation, and other peculiar thoroughbreds. Pete says that the Sensations are just beginning to be appreciated. They are the poor man's horse, for if trained carefully and not worked to death they will keep running well up to the form, race after race. As to the trotters he said:

"If you don't divvy the other fellows will play against you and carry you all over the track, unless you hit your horse to a heavy sulky and give them a dose of their own medicine by putting them into the fence, but a man with a valuable horse cannot afford to do that. I had to laugh at the story told by a running horse man who was flush, and thought he would try his luck on the trotting turf. He said:

"I put myself in the hands of a friend who said he knew all about it, so he bought me a trotter. 'Now,' he said, 'you need a meek, smooth-talking chap, as a trainer. Next I had to provide for a groom, who knew it all and more too. The trainer told me we must have a Caffrey sulky and a Comerford harness, costing about \$225; next an outfit of boots and clothing, about \$100 more. The groom put in by saying I ought to hire a boy to wash the rub-rags and keep the bedding clean, while he took the best of care of the horse. I told I thought until we won something I could do that myself and save the boy's boss."

"Well we went to the races, and did not get a place in the first race. The trainer gave me what they call 'the conservation,' and said: 'He's coming; we will make a killing before the circuit is over.' Next week we saved our entrance, but there was the expense of taking around horse, trainer and groom, with your hand in your pocket at every turn—a heeler or two on the day of race, \$5 to carry your horse's trunk, foot-lub and muzzler to the track, ten per cent entrance, full rate of board for horse and more than full rate for man—all these expenses running on. 'But we will get them back at the next town,' said the trainer. The killing day came; there was a lot of whispering and whistling around the stalls and in secret corners, between my trainer and the other fellows who were to team the other horses against mine. It turned out that my horse won the race, and when I went to draw the money the trainer had been there before me. At last, when he figured up the pools and purse, he told me that there was a 'whack' between him and me, and that other fellows had given it away which horse was to be played for the winner, that outsiders 'got on to it' and spoiled the betting, and that our share of the 'divvy' was \$250, being just half of first money and barely enough to pay what I had advanced. I shipped the horse home and retired him to private life, and when any training-horse man comes around and tells me that he knows of a green one that can be bought right and will win a lot of money, I say: 'Yes, for the gang, but not for me.'"

The moral of this story is if you get a good colt, sell him for the best price you can get, and let some one else "develop" him. You will have more money and less trouble than if you start in to do it yourself.

Feeding Hay to Horses.

The attempt to make hay the chief ration of horses imposes a severe tax upon them, and the result is seen in their distended stomachs and the spiritless and clumsy horses of many farmers. All intelligent students of the horse give little hay and feed grain more liberally than to the run-of-the-mill horse, for the double reason that the horse will make poorer use of the hay than the steer or sheep will, and will be less easy of motion. Good horse feeders give but ten or twelve pounds of hay a day and feed once or twice daily. A colt is kept for his muscle; hence a fattening diet is out of place until matured and set to work. For the horse, bran mixed with corn meal will serve to assist digestion, while, incidentally, it will make more valuable manure. One half pound of linseed meal, where carrots or some other roots or ensilage are not fed, will tend to keep the bowels open and secretion good. For traveling horses there seems but little doubt that oats are the best, although usually the most costly food. Horsemen agree that for a road-horse oats have no substitute.—Prof. J. W. Sanborn.

Horse Gossip.

Two trotting horses have dropped dead on the track the past week.

THREE RIVERS, this State, will have a three days' trotting meeting September 24 to 26, inclusive.

B. J. THEACOT, of Lexington, Ky., has sold to Detroit parties the chestnut three-year-old colt Outlook, by Onondaga, dam Sunlight, by Imp. Bonito Sootland.

The sixth annual exhibition of the National Horse Show Association of America will be held in Madison Square Garden, New York city, November 10 to 15.

G. V. HANKINS, of Chicago, and Sam Brown, of Pittsburgh, will sell their horses and leave the turf. It would not injure the sport if several others would imitate their example.

The owner of Roy Wilkes, 2:08½, says the breeding of his dam has been traced out, and that she was by Blue Bull, out of a mare by Bull of the Woods; g. dam by Cecil's Quicksilver.

A. H. KORTLANDER, of Grand Rapids, has purchased from D. Van Buren, of Zealand, Ontario Co., the three-year-old bay stallion Leand Medium, by Fairlawn Medium, dam by Judge Leand.

At the breeders' sale at Cleveland, Ohio, this week, S. A. Brown, of Kalamazoo, purchased the station Ashwood, by Nutwood, dam Flora Abdallah, for \$1,300, and Rosebud, by Aberdeen, dam sister to La Grande, for \$2,000.

ED GREENS, in whose stable Hal Pointer is, says that he will match his horse against Roy Wilkes for \$5,000 a side at equal weights. Green weighs 165 pounds, and he wants Roy Wilkes to draw the same load. Roy's record is 2:08½.

Nutwood did fair to lead all sires this season in the number of new additions to the standard list. He has nine so far. Happy Medium comes next. Michigan sires have the following: Masterdole, three; Dauntless, two; Louis Napoleon, eleven. This was up to September 1st.

The St. Johns, Clinton County, News tells of a team of horses owned there by a Mr. Carr which recently drew 9,720 pounds of gravel at one load. With the wagon the total weight of the load was 11,250 pounds, or five tons, 1,250 pounds. That is a good load to pull over a dirt road.

Two of the get of Adelaide, 2:10½, have gone into the list this season, Nina De, 2:26½, and Addie D., 2:37½. Both are sired by Nutwood, and are therefore full sisters to the stallion Nuttingham, owned by Mr. W. Wilkes.

of Pontiac. Adelaide was by Phil Sheridan, and was a fast and game little mare when on the track.

Has there been a four-mile race this season? If so, did Salvador or Tenny take part in it? FLINT.

We have heard of two four-mile races this season. The first one was at Clinton, N. J., April 14th. Three started, namely, Miss Cody, Bela and Vigilant. Miss Cody won in 7:27½, carrying 108 pounds, Vigilant second. The next one was at Brighton Beach on August 27th, when seven started. Bonanza won in 7:40½, over a very heavy track, with Nattie Green second and Dundee third. We don't think either Salvador or Tenny has run over a mile and a half in any of the races in which they have taken part. Salvador ought to be good for the distance, but we doubt if Tenny is. A mile and a quarter seems to fit him best.

The growth in racing in this country, even during the past four years, has been what the newspapers call "phenomenal." It is certainly unprecedented. Four years ago England had a good many more horses in training than the United States, and offered more money in prizes. Now there are in the United States 2,500 more horses in training than in England, and over \$1,000,000 more is offered annually in prizes. Four years ago the only great two-year-old stake was the Junior Champion, whose value was then about \$30,000. There were no other two-year-old stakes worth more than \$10,000. This stake, run on August 12th, was worth this year \$25,000, and it is now only one of a number of others equally rich.

The best feature of the "Imley" races last week was a trot against time by Peter Ulrich's sturdy young mare, which covered ten miles in the remarkable time of 35 minutes and 35 seconds, on a wagon of \$100 placed by John Axford, of Oxford. Uncle Peter himself held the ribbons, and the mare needed little urging—accomplishing the task with comparative ease. The turfmen present all declared it to be an impossible feat without killing the animal, but at the end of the last stretch Mr. Ulrich sent the gamy trotter around once more "for a cooler." Horsemen were surprised at the endurance of the mare, as she appeared quite fresh and vigorous after the performance. Can't fool Uncle Peter in a long-winded race.—Lanier Democrat.

MR. ELLIOTT GRAY, who will be remembered by many stockmen of the State as a former resident of Lenawee County, near Tecumseh, has returned to Michigan and purchased a farm near his old home. He has brought back from England a couple of Suffolk-Punch draft horses, and a large flock of Shropshire.

The horses are Rattle 1795, Suffolk-Punch Stud Book, bred by Mr. Rattle, sired by Prince of May 1856, dam Depper, by Tipton 1867; Tub 1798, S. P. Stud Book, bred by Mr. Barrell, sired by Banker 1444, dam Blossom, by Suffolk Star 1326; Farrington 1925, S. P. Stud Book, sired by Bar None 1514, dam Scott, by Wantland Duke 534. Besides these he also brought out for Mr. G. Peters, of Manistee, the Suffolk-Punch stallion Minstrel Boy 1759, S. P. Stud Book, bred by Mr. E. Capon, sired by Ontario 1337, dam Grace, by Garrett's Viceroi 570, S. P. Stud Book. We predict these horses will recommend themselves to farmers who wish to breed draft or heavy work horses. The Suffolk-Punch is one of the best breeds of horses in Great Britain, and will breed as true as thoroughbreds. Mr. Gray was accompanied on his return trip by Mr. Fred. Smith, son of the well-known breeder of Suffolk-Punch horses, Alfred J. Smith, Rensselaer, Woodbridge, Suffolk.

THERE has been a dispute for some time as to the name of the party who owns Roy Wilkes, the fast pace. The following card in the *Breeders' Gazette*, L. A. Davis, who has charge of him, would seem to put that question at rest:

"I have just seen your editorial of Aug. 27, in which you state that I paid a fee of \$1,000 in order to have Roy Wilkes started at Washington Park. This is not true. Mr. Crutcher, through his representative, was on hand and produced a legal bill of sale; his representative also paid under price, \$150 for change of name from Roy to Roy Wilkes, \$50 being paid for change of name, \$100 being a fine for performing under the new name. The facts are that Roy Wilkes was called Roy in two or three races as a colt. At Cedar Rapids, in 1887, his name was changed to Roy Wilkes, by Mr. Hayden, his owner. Roy Wilkes was paid the National Association trophy the change. He never performed on an American Association track to my knowledge under the name of Roy, and I believe that in justice to the horse and his owner, the money paid under protest will be returned by the American Association, whose officers have had a reputation of fairness heretofore. "The injustice done me at Lexington last fall, in due time, be noted upon in the proper manner."

All the same it is very doubtful if Roy Wilkes is ever allowed to start on a National Association track. There has been too much "management" on the part of his owners.

The Farm.

Prevention of Hoar Frost.

The prevention of early autumn frosts, strange to say, has received scarcely any attention in Canada, although it is quite practicable, and would save hundreds of thousands of dollars annually by extending the growing season several weeks.

Early in September the inland and higher districts of Ontario, especially in the northern parts of the province, look for frosts damaging to the more tender garden vegetables. By the end of the month hoar frosts usually occur over most of the province; only the lake borders of the southern counties and a few other favored localities along the lakes escaping. Damaging frosts, which would kill potatoes, almost invariably come over nearly the whole country before the latter part of October. Now that market gardening has become a large industry, owing to the great growth of our city and town population, the possibility of delaying the advent of the first killing frost becomes a matter of much commercial importance. It is not infrequently means a month's extension of the season for tomatoes and other autumn fruits and vegetables. To the grower of the more delicate of grapes, and even in some localities to the grower of the hardy native vines, it is a matter of concern, while in occasional years the hop grower of our inland districts would find the prevention of a light early September frost save him thousands of dollars through preventing deterioration in the quality of his crop.

Hoar frost occurs at various temperatures. Commonly, especially in the humid lake borders, it is rare on average soils when the mercury at ordinary elevation above the ground does not fall to 36° in the inland counties, where the atmosphere is less humid, and radiation consequently is more intense, it is not infrequently occurs at 39°. It has been known in Ontario at 42° and in California

at as high a temperature as 46°, or fourteen degrees above the freezing point. There are some localities especially liable to frosts. Those have damp soils, on which the evaporation produces a loss of heat; or where the shallow surface earth rests on an impermeable, non-conducting subsoil, which excludes internal heat from the surface vegetation on nights when, under a coal-black, moistureless sky, the radiation is excessive. It is such spots that give rise to many reports of early hoar frosts which are not experienced on the average soils around.

The most obvious preventive of early frost is through drainage—both surface and under drainage. Subsoil plowing to is here an advantage. But on the best drained soils there are September or October nights when frost occurs without a fall of the mercury to freezing point. Here the utility of the smudge fire is apparent. A few smouldering rubbish heaps, scattered along the western side of the garden, vineyard or hop yard will amply suffice to ward off such frosts. The piles may be slightly damped, if need be, to make them burn with little fire and much smoke, but even a thin film of vapor, so thin that the stars may be seen through it, will check radiation and maintain on the surface of the plants a temperature six to ten degrees greater than could be recorded without the presence of the protecting veil.

In many parts of Europe, as on the Rhine, where early September and even August frosts occur, the vineyards are commonly protected by smudge fires. The hop yards and gardens of that continent also extensively use this expedient. It is not so much needed in insular climates like Britain, where autumn is rarely sunny enough to ripen vegetables that escape frost, but in continental climates like our own, where ripening warmth and sunshine sometimes are unbroken for weeks after the first damaging frost, the smudge fire deserves to have a well recognized place in the methods of the gardener and farmer.—The Empire.

Manure or Compost?

It is very curious to find in the public prints articles, by gentlemen evidently good farmers, using such expressions as this, which we copy from the *Country Gentleman*: "Barn manure applied at the time of seeding to grass will result in weedy meadows."

We think if everything was called by its proper name, a correct train of thought would follow the use of every word used in agricultural parlance (as well as in every other subject). If we adopt the word manure to replace that of dung, which now-a-days is banished from modest discourse, as its true meaning will warrant, and use compost in the sense that it is manure rotted down, weeds and all, we shall always know that when a man applies manure to his land, he is trying to grow weeds; and if he uses compost, that he is sure to kill weeds, matters would settle themselves down into their natural channels.

There are certain crops to which it will do to apply manure, but only when compost is out of the question, and when after-cultivation is to be persistent enough to eradicate the weeds which are sure to follow. After a farmer has once inaugurated a regular habit of composting the droppings of his stock, till weed seeds are totally destroyed, he will never go back to the old, foolish way of sowing weed seeds, which of themselves never fail, but which, after soaking in the richest of his manure, are rendered ten times more sure to grow than nature originally intended. Kill weed seeds, and enrich crop seeds, is the true policy.—German Town Telegraph.

Stunted by Stops.

It is the nature of plants to grow continuously until matured. Checked in this process they receive permanent injury. It is thought by some that growth may be interrupted for days or weeks by drought, and when favorable conditions of weather occur plants will proceed to full maturity, as though nothing unusual had happened, but this is not so. Growth in bulk may cease for a time, but progress toward maturity advances every moment, no matter what the conditions, unless killed outright. Once checked by adverse conditions a plant never completely recovers to make full growth. Illustrative experiments were made this drouthy season with early cabbages. Some were kept irrigated thoroughly all through the drouth, some after its continuance two weeks, and others not at all, with the result that all are equally mature, the constantly watered are three times the size of the partly watered, and the latter twice the size of those not watered at all.

I believe this lesson to be of equal value in the realm of animal life. Live stock should be so fed and handled that growth will be continuous. A check is permanent injury, and cannot be fully compensated for. Others think young animals can be kept along in a sloughed manner, and subsequent liberal feeding will bring them to the point where they would have been had they been steadily fed and cared for from the start. A merchant moved into the country and obtained two pigs to winter over for his next year's pork. He fed them nothing but scraps and slops from the kitchen, saying all that was necessary was "to keep the breath of life in them," and that next season, when he would have grain, he could "feed them enough to make up for lost time." He fed all the corn they would eat from August 1 to killing time in October, but with little benefit; they had been so "stunted" that they could not recover, and made less than 100 pounds of pork each.

Agricultural Items.

At a farmers' meeting in Vermont last winter a prominent agriculturist said he thought we ought to buy more meal and less commercial fertilizers. He could make a good profit in buying meal and selling butter and using the meal as a fertilizer.

The price of hops is advancing, owing to the reduction of the supply of the old stock and the prospect that the new crop will be 20 per cent below an average. The quality of the new crop is higher than the average. Opinions are held by speculators on about one-third of the crop.

Tax managers for all classes of stock, says the *American Agriculturist*, should be low, otherwise the muscles of the neck become stiff and contracted from want of exercise.



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THE LADIES' HOME JOURNAL, Philadelphia, Pa.

Horses long accustomed to high feed boxes often suffer severe pain in grazing when sent into the country for recuperation, from this cause.

POTATOES should not be allowed to lie in the sun after being dug. If they need drying out spread them under a shed. The best plan is to sort them as they are harvested, so as not to store what are unmerchantable, and to have those suitable for food for stock where they will be used in moderate quantities during the winter.

T. B. TERRY, the well-known specialist in potato growing, speaks in high terms of the Monroe Seedling potato, and thinks he made a decided hit when he invested in this variety. The yield this year is far in advance of any other sort. He says many farmers in Summit County, Ohio, which is a great place for potatoes, will have to buy or grow without.

AMERICANS do not appreciate the value of cheese as a nutritive food, as much as do the people of Great Britain, who are much larger consumers than Americans. It is used more as an article of luxury, and as a dainty, than as a regular food. It is too concentrated a food to be proper for dessert and should be eaten with the meal to obtain the best results.

THE *Farmers' Home Journal* says that owing to the failure of the corn crop in many counties of Kentucky, farmers are selling their stock hogs for whatever they can get for them, in some cases as low as three cents, sometimes actually giving them away. In Tennessee the same conditions prevail, and prices are even lower, touching 2½¢ at some points.

COMMISSIONER VALENTINE, of Vermont, who has charge of the schemes for repopulating the deserted farms of that State, has brought in three colonies of Swedes, two of which have become well established, the third being a failure. Commissioner Batchelor, of New Hampshire, found there were 1,342 deserted farms in that State and has succeeded in getting 301 of them tenanted. The New Hampshire idea is more popular with the people than the immigration scheme of Commissioner Valentine, the people rather resenting the influx of foreigners.

FRANCIS WYATT, of the *Breeders' Journal*, in the *Rural New Yorker*, says: "The inferiority of American to Canadian barley for brewing purposes is a more matter of tradition and prejudice. The fact of the case is that the majority of Americans have never learned that a good malting barley must be grown under certain well defined conditions of soil and climate—the former a sandy loam containing much lime, the latter temperate, moderately warm and not too wet. They have also learned how to handle their barley after gathering in their crops, and thus of the sixty million bushels now annually produced, about one-half is of excellent quality for the manufacture of malt."

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Good News to Horse Owners!

A SURE CURE FOR HEAVES. Three Colonies of Swedes, two of which have become well established, the third being a failure. Commissioner Batchelor, of New Hampshire, found there were 1,342 deserted farms in that State and has succeeded in getting 301 of them tenanted.

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Horticultural.

PEACH BORER AND CARPENTER BEE.

Prof. W. J. Ruhl.
GRASS LAKE, Sept. 19, 1890.
DEAR SIR:—The Farmers' Club of this town met yesterday, and information concerning insects being desired the secretary was instructed to apply to you for it. We wish to know the best remedy for the peach tree borer, and also for a worm that is honey-combing some houses. One house so infested has a tolerably good coat of paint upon it though it has not been painted for two or three years. If you will kindly inform us of some remedy for these pests, and publish same in the MICHIGAN FARMER, we will be very grateful.
MISS H. S. IRWIN, Sec.

ANSWER BY PROF. A. J. COOK.

I cheerfully comply with Miss H. S. Irwin's request. The mature insect of the peach borer is a beautiful blue wasp-like moth. This moth comes forth from the pupa state, or chrysalis, at the base of the peach trees in Michigan, from early in July till in September. I presume the soil is responsible for this exceeding variation. In a warm sandy soil they mature early, and the moths come forth in July; while in a damp cold clay soil the moths will not appear till early in August. Thus the eggs are being laid about the trunks, close to the earth, all through the months of July and August. These eggs hatch in a few days, and the borer—a white sixteen-legged caterpillar—commences at once to feed on the bark and outer sap wood of the peach tree just beneath the earth. Often they girdle the tree and of course kill it. These larvae or caterpillars continue to feed till the next June, then pupate, and soon the moths come forth again.

There are several ways to destroy these destroyers. I think the best, as it is the surest, is to dig the pests out and crush them. This ought to be done in September, as by that time some of the borers are so large that they will dig signal harm unless killed. But others will be so small as to escape attention. And so the work ought to be repeated in the following May.

This is not so hard as would seem, as the wound bleeds and the gum makes a wax mass of earth and gum which quickly tells if the pest is present. I think this method has always given satisfaction when thoroughly used, and in many sections it has been so well and generally practiced that the borers have been practically exterminated. Some have claimed that pouring boiling hot water about the trees, first digging away the earth, has proved a success. Others have mounded about the trees with earth or ashes in July and August. In September the mounds have been leveled, and the theory is that the borers left high up above the earth soon die of exposure. Digging away the earth and pouring in the kerosene emulsion has also been recommended. No doubt all these remedies have their merits; but the digging-out process is probably about as cheap as any other, and surely the most certain of success.

No doubt the insects that are boring into the houses about Grass Lake are carpenter bees, probably *Xylocopa Virginica*. These bees are large and much resemble bumble bees, except that they bore into boards, etc. to form the cells in which they feed and rear their young. The only harm they do is to mutilate buildings. I have heard of their boring into cornices, window cases, etc., in many parts of the State. I have always recommended that an entrance made of lard or tallow and kerosene be pushed into the holes, and I have never known it to fail of driving the pests away. This should be applied at nightfall, then there will be no danger of being stung. Kerosene is very obnoxious to insects and so drives the mature bees away, while it kills the young bees that are being fed and reared in the tunnels. I am sure if this is tried all will be satisfied with its efficacy.

LENAWEE COUNTY HORTICULTURISTS.

The September meeting of the Lenawee County Horticultural Society was held at J. M. Blanchard's on the 10th. The ladies discussed pickles, and the men took up the topics in the question box:

Q—Should runners be cut from grapes during growing season?

H. C. Bradish—Yes and no. With a slow growing vine, as Delaware, do not cut back, but rub off some of the buds while starting. The end of rampant growing vines, as Clinton, Azarum, etc., may be pinched off when several feet long. Bag grapes early to protect from rot, cracking or birds.

Q—How far apart should grape vines be planted?

Mr. Bradish—Where land is cheap place the rows eight feet apart by twelve feet in the row.

Q—Is the Clinton profitable?

It is said to be the best grape raised for jelly. That is about all that it is good for.

Q—Is white heliobore sure death to the currant worm?

Mr. Hood—Yes.

Mr. Sheffield—Applied with water; results were not satisfactory.

Mr. Gibbs—Put it on dry with a five cent bellows.

E. P. Allis—Or with a tin pepper box while the dew is on.

Q—Is there any advantage in mulching raspberries, grapes and currants with straw?

Secretary Gibbs—There is.

Q—What about spraying?

E. C. Smith—Last year, from two orchards, the one sprayed gave one-third second, the one not sprayed gave two-thirds second.

Q—Can the quince be raised from cuttings?

E. W. Allis—Yes. Cut either in fall or spring. In fall lay them on the grass and cover with leaves, and throw on boards to keep the chickens from scratching the leaves off. If not winter killed the young shoots may be cut in the spring.

Q—When is the season for rooting cuttings?

Mr. H. C. Bradish—Whether cut in fall or spring, set in spring. Roots may be hastened by tying in bundles and setting bottom upward, and covering entirely with dirt for a few weeks before to put out, to expose the bottoms to the heat, and start the roots in advance of the buds.

Q—How many grapes be used?

Mrs. E. C. Smith—By making green grape jelly, spiced grapes and grape butter.

Mrs. C. H. Bradish—Canned grape juice makes a fine summer drink.

Mrs. Allis uses one-third sweet apples and two-thirds grapes, cooked, and worked through a sieve. Use ten pounds of fruit to six of sugar. She also cans elderberries and grapes for making "huckleberry pie," during a scarcity of the real article.

Mrs. H. C. Bradish puts grapes and sugar down in alternate layers.

Q—What shall we do with grapes when they sell at two cents per pound?

Mr. Bradish—Plant and raise better varieties. Delaware and many others yield well, and always bring a good price.

Q—How can grapes be kept after being matured?

H. C. Bradish—Some varieties are good keepers, others are not. Niagara, Salem, Isabella and Agawam are fair keepers; Concord is not. If kept too dry, they will shrivel; if too damp they will hurt. My cellar keeps them well. Many do not. By opening the room nights, and closing it days, the temperature may be kept reduced.

The display of grapes, with many duplicates, and over twenty of the best varieties grown, contained a collection of sixteen very fine samples by Mr. H. C. Bradish alone.

Subjects for next meeting.

A. M.—What applies to plant for market and what varieties to plant for home use.

P. M.—How to raise apples for market.

Each lady is especially requested to give a recipe for some article of food that she has tasted and considers especially good, and bring a sample of the same.

The next meeting is to be with G. B. Horton the second Wednesday in October.

Fruit Crops on the Same Site.

D. Nicol, in the *Canadian Horticulturist*, propounds the question—Can strawberries be continuously grown on the same land with profit? and answers it as follows:

I have been growing strawberries for market for over forty years, and have often tried renewal, but have never found it profitable. After taking off the second crop of fruit, I have summer fallowed, manured heavily, and generally the following year have obtained a satisfactory crop of roots, corn or potatoes, which left the land, as I long supposed, in the very best condition for growing strawberries or any other small fruit. Yet with me, the yield of the second planting has never been half as large as that of the first; hence I conclude that there must be some peculiar element, mysteriously essential to the growth of the strawberry, extracted from the soil with the first heavy crop, and that I do not know how to replace it.

In European gardens strawberries have for many generations been grown as a rotation crop, and I have seen strawberry beds fifteen years old, but it certainly could not be said that they were productive, and some peculiar element, mysteriously essential to the growth of the strawberry, extracted from the soil with the first heavy crop, and that I do not know how to replace it.

On account of the white grub it is necessary to plant and ground two years in good crops to give this pest a chance to get out of the way, and the common practice is to manure in the spring that the strawberries are planted, or more frequently not manure at all. I am convinced that ordinary manuring just before planting does not pay in proportion to the cost, as in the nature of things much of it does not become available until too late to help the growth. It is far better to manure heavily the crops of corn and potatoes in the years of preparation, and thus get a double recompense. All berry men agree that the first crop of strawberries is the one to work for, and the extraordinary yield of two hundred bushels and upward per acre is only obtained by the most careful attention to all these details that give the highest yields of farm crops.

In fitting the ground, it is best to begin early, first plowing deeply, then pulverizing finely, and finally floating down flat with a level finisher or boat. When the earliest farmers plow for oats then fit the ground, even if it is a month or six weeks before planting. Weeds will start, but a sweep of the trowel removes these where the plant is to be placed, and cultivation between the rows can commence at once, destroying the weeds and aerating the soil.

The poorest part of a fruit farm may be planted in blackberries, with a dead certainty that the land will improve in quality, and that the berries will be less subject to winter-killing. If desirable the ground can be top-dressed at any time afterward, by leaving the manure in piles in the cross-paths and distributing with a hand-cart or wheelbarrow. The blackberry not only sends its roots all through the soil, but has large and abundant leaves which hang on until early winter snows beat them to the ground, where wet and heavy they never blow away, but lie to form a mulch and aid in the nutrition of the soil. In this way the blackberry not only holds its own, but slowly gains on the soil.

The Apple Maggot.

The entomologist of the Maine Experiment Station has been studying this insect and the result of his investigations is embodied in the last report of the Maine Pomological Society. Prof. Harvey, the entomologist, says:

This enemy is properly regarded as a worse enemy to the apple crop than the codling moth, inasmuch as it perforates the whole interior of the fruit, while the codling moth is mostly confined to the core. It cannot be reached by spraying, coming too late in the season, and being shielded under the skin. It has been known to entomologists more than twenty years, was introduced to Maine from adjoining States eight or ten years ago, and its ravages have gradually increased so that it has spread over most of the counties of the State. From careful observations it appears that the fly first deposits its eggs early in July and so on into August, and early in September the worms are found in abundance. When the infested fruit drops they go into the ground, but not over an inch in depth. They have little power to penetrate hard soil, and prefer sandy ground. Prof. Harvey examined them in connection with more than sixty named varieties of the apple, and found that such early apples and autumn varieties as Benoni, Oldenburg, Early Harvest, Porter, Red Astrachan, Gravenstein, Golden Sweet, and, in fact, all the early varieties were badly infested by them, while most but not all the winter varieties were more sparingly attacked. Hence the remedy proposed by some entomologists, to cut down all the early trees and thus avoid them, is objected to, and would still leave

enough of the winter apples for their increase, among such as Talman's Sweet, Wagner, Esopus Spitzenburg and Northern Spy are mentioned.

The insects have sharp ovipositors, and penetrate the tough skin of the fruit, placing the eggs beyond the reach of any sprayed insecticide. Prof. Harvey remarks that "there is no easy way to check trypteta," and that it will have to be done by a direct, squarely fought battle. He places the chief reliance on destroying the windfalls. The larvae do not leave the apples till they drop, and if these are daily gathered and fed to animals, or still better if sheep run in the orchard, they promptly gather the windfalls as soon as they drop. This method is strongly recommended by other entomologists. Prof. Harvey also suggests "that the making of elder from maggoty apples might be profitable, and would afford those who drink both meat and drink at the same time."

We also suggest the importance of giving a hard and smooth surface to the ground under the trees, as the insects appear to have little power to penetrate a hard crust. A loose sandy soil favors their transformation; a clayey soil has a retarding effect. The growth of grass in the orchard, making a tough sod, increases the difficulty of their penetrating the soil, and when the grass becomes dry it may be burned with them. As they enter the earth only an inch, some systematic mode of turning them under half a foot or more may be the means of placing them where they will stay.

How to get Big Berry Crops.

Mr. L. B. Pierce, writing in *Vick's Magazine*, gives some excellent hints for success in the culture of raspberries and currants, from which we take the following points:

For black cap raspberries or currants there is little danger of getting the ground too rich. A study of the native haunts of the raspberry, growing by decayed stumps and logs, and in rich fence rows, should convince any one what the needs of this fruit are. Raspberries seem to take considerable from the ground, and, unlike blackberries, leave it after a few years very much impoverished. The differences in the first crop of raspberries between rich and poor soil is wonderful. A neighbor last year gathered two and one-half bushels of Gregg raspberries from three rows twenty-four feet long. The canes each seven feet from the ground, and are wonderful to see. The ground is a rich garden, and was top-dressed with fine manure.

An acquaintance planted one thousand Gregg raspberries on a barn lot of very rich soil, and gathered, fourteen months later, thirty bushels of fruit. Encouraged thereby, he planted five acres on ordinary or rather thin soil, and has not gathered an average crop in three seasons. A city florist and tree jobber planted four Doolittle raspberry plants where a compost heap had lain. The growth was extraordinary; they were twice pinched back and one of the plants produced sixty-one canes that reached the ground and took root.

The experience of J. M. Smith, of Wisconsin, of Peter Henderson and others, is that the ground that is full of humus and the unused portions of manure used in vegetable gardening is the best for heavy crops of raspberries.

On account of the white grub it is necessary to plant and ground two years in good crops to give this pest a chance to get out of the way, and the common practice is to manure in the spring that the strawberries are planted, or more frequently not manure at all. I am convinced that ordinary manuring just before planting does not pay in proportion to the cost, as in the nature of things much of it does not become available until too late to help the growth. It is far better to manure heavily the crops of corn and potatoes in the years of preparation, and thus get a double recompense. All berry men agree that the first crop of strawberries is the one to work for, and the extraordinary yield of two hundred bushels and upward per acre is only obtained by the most careful attention to all these details that give the highest yields of farm crops.

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The poorest part of a fruit farm may be planted in blackberries, with a dead certainty that the land will improve in quality, and that the berries will be less subject to winter-killing. If desirable the ground can be top-dressed at any time afterward, by leaving the manure in piles in the cross-paths and distributing with a hand-cart or wheelbarrow. The blackberry not only sends its roots all through the soil, but has large and abundant leaves which hang on until early winter snows beat them to the ground, where wet and heavy they never blow away, but lie to form a mulch and aid in the nutrition of the soil. In this way the blackberry not only holds its own, but slowly gains on the soil.

Ripening Tomatoes for Early Market.

In growing tomatoes for market, the premium is and always has been on earliness more than on any other thing. Whoever succeeds in getting his crop before his customers a week in advance of his competitors, is sure of a good price, and of good profits, and this even when the fruit is not up to the standard as to size and quality.

This observation is not new, nor confined to this country. The market gardeners about Paris, France, have also found it out some time ago, and as told in the *Revue Horticole*, often employ artificial means for hastening the maturity of the crop. To do this, the fruit is picked when yet green, but approaching maturity, and spread out upon a layer of straw under the hot-bed sashes. Here they are lightly sprinkled from time to time, to keep the atmosphere moist, and prevent them from shriveling. During the greatest heat, on bright days, partial shade must be provided, else the tomatoes will be liable to get burned or scalded.

It takes but a few days of such treatment to bring out the bright color of maturity in the fruit, but the latter usually fails to attain to the full rich flavor of the tomato when naturally ripened. The quality of specimens picked in the more advanced

stages of ripeness, however, as indicated by even the slightest beginning of coloring, is not perceptibly impaired or altered. Melons may be treated in a similar way for the purpose of hastening their maturity.

Our progressive market gardeners usually rely for their early fruit mostly on the selection of such early varieties as King of the Earlies, Earliest Advance, perhaps Dwarf Champion, etc., and on starting the plants very early under glass. It may pay them to try the method here described.—*Popular Gardening*.

Ants on the Lawn.

Boiling water, kerosene, or a solution of fresh insect powder in water, poured into the hill, will probably make short work with its inhabitants. *Insect Life* (October, 1890) contains an article on "The Little Red Ant," by Prof. C. V. Riley, in which he suggests the use of kerosene, pyrethrum, or bi-sulphide of carbon. Where the nests are outside nothing is easier than to find them and destroy the inhabitants with kerosene or bi-sulphide of carbon, he says. The nests are almost always in the immediate vicinity of the house. The ants are peculiarly susceptible to the action of pyrethrum in any form, be it Persian or Dalmatian powder or buhach, and a free and persistent use of this powder will accomplish much. The best means of trapping ants consists in placing small bits of sponge moistened with sweetened water in the spots where the ants congregate, collecting the sponges once a day or so, soaking them in hot water and then replacing them. Small bits of bread and poisoned molasses or small vessels of lard in which a few drops of oxalic acid have also been recommended, as well as the free use of borax, so often advised for roaches. A much larger black or brownish ant often builds its nests in dooryards so close to the houses that it becomes a great nuisance. A case was brought to my notice two years ago in Washington, where a large colony was completely destroyed by the use of bi-sulphide of carbon. A teaspoonful was poured down each of a number of openings, and a damp blanket was thrown over them for a few minutes. Then the blanket being removed, the bi-sulphide was exploded at the mouth of each hole by means of a light at the end of a pole. The slight explosions drove the poisonous fumes down through the underground tunnels, killing off the ants in enormous numbers.

Horticultural Items.

SHIAWASSEE COUNTY had a big plum crop this season.

THE Benton Harbor *Palladium* says S. H. Comings will gather about 1,600 bushels of fruit from his cranberry bog at Grand Marais.

It is estimated Wisconsin's cranberry crop will be about 40,000 barrels this year. The Cape Cod and New Jersey crop will be above an average.

WM. FALCONER, of Long Island, is a believer in August planting of strawberries, such plantings giving the finest berries and the two-year-old plants the heaviest crops.

THERE are some apples in Ingham County, it seems. The Mason *Democrat* states a basket thirteen inches long, taken from the orchard of Delos Wolcott, contained forty-two apples.

THE National horticultural congress, called to arrange for a fitting horticultural exhibit at the Columbian Exposition at Chicago in 1893, recommended Hon. Parker Earle, now of Benton Harbor, formerly "strawberry king" of Cobden, Ill., as commissioner of horticulture.

ONION seed may be sown this fall, late on well-prepared ground, to start and begin profit-making with the late winter sunshine, and long before severe frosts are over or weeds awake to business. Select a piece of warm, light soil protected by woods, walls or fences, plow into it a covering of three or four inches of horse manure. After turning each furrow stand in it a row of scullion onions, not more than one inch apart; they will make bottom all winter and sell rapidly as a relish weeks before other truck is ready.

THE Country Gentleman says: "There are some advantages in training currant bushes to a single stem at the ground. They are more easily cultivated and kept clean, and they have a neater appearance. Such bushes are easily raised by rubbing off all the buds from the lower part of the cutting when it is planted, or all which will be below the surface of the earth. But as good crops of fine fruit may be had from bushes which have several stems, provided they are pruned, kept sufficiently clear of old wood, and are well manured and cultivated and kept clean."

THE failure of the apple crop is a calamity which affects many lines of business. Not only must fruit-growers stand a heavy loss, but packing and evaporating establishments will stand idle, and thousands of men, women and children will miss the employment which these institutions would have given them. There will be no call for fruit barrels and many other fruit packages, and the men who make them will have no trade. In short there will be a stagnancy in the fruit trade such as has not been experienced in a long time, if ever. The export business, also, must of course cease.

B. F. EVERTS, claims that burning over old strawberry beds saves half the hoeing, the plants on a burnt bed grow with more vigor, leaf-blight or rust will be prevented, at least to some extent, insects and their eggs will be destroyed and the clearing off of the mulch and weeds by the fire is alone benefit enough. In his opinion, to make it the best plan he knows of. He adds: In heavy soils the ground gets very hard from being tramped over by the pickers and burning the mulch will make such soils "mellow up" easily under the cultivator and retain moisture much longer than if not so treated. Why it is so I cannot say, but I know from experience that this is the fact.

THE State authorities of Connecticut have been compelled to undertake the extermination of the gipsy moth, which has threatened to utterly destroy the shade-trees of every locality in which it has appeared. The task has proved both troublesome and expensive. The insect got its foothold in this country in this manner: A Medford scientist brought over from Europe two or three years ago a species of moth unknown to this country called the "gipsy," and experimented with it to see if its caterpillars would not make silk, and he either turned them loose or let them eat away through his carelessness. They have spread and multiplied till, like the English sparrow, they are regarded as a pest to be suppressed by State aid.

Apianian.

The Best Bee-Hive.

G. W. Stockwell, in the *Country Gentleman*, says, in reply to an inquiry, that the best hive is the Simplicity hive. It is made in many places, of various patterns externally, but always with the same dimensions in the interior.

The Simplicity is the best because it is the simplest, the cheapest, and the most convenient, and hence, because it aids the beekeeper more than any other hive. It is a double hive, one body or brood chamber placed above the other, fitted by beveled edges to keep in place, and to exclude rain.

The lower story is the brood-chamber, the second is used for surplus honey, whether comb or extracted. If extracted honey be the object, the frames in the second story are like those in the brood-chamber, simply brood-frames filled with comb. If comb honey be wanted, then wide frames must be used in the second story, seven frames with eight one-pound boxes in each, making fifty-six boxes in all. An improvement is found in the hive of W. W. Cary, of Colerain, Mass., the second story of which is divided into two half-stories, giving greater convenience in handling, and permitting tiering up.

The utility of this hive is beyond question. Success in beekeeping is found in strong colonies. Bees should be allowed to swarm (they do usually whether allowed or not) to "exercise their natural rights," provided they swarm before first of June.

After the first of June, swarming, unless artificial, should be discouraged. The best discourager of swarming, the best builder of strong colonies, is the two-story Simplicity hive arranged as described. It gives room, permits ventilation and makes the best bee workshop as shown by continued experience in practical beekeeping.

THE *Ouranna Independent* says a bee tree recently cut in Hazelton township, Shawansee Co., yielded 100 pounds of nice honey.

THE State convention of beekeepers is to be held in Detroit, Jan. 1, 1891, the object of selecting New Year's day being to get half-cent on the railroads. A large attendance is hoped for.

W. Z. HUTCHINSON says editorially, in the *Bee-Keepers' Review*, that for out-door wintering of bees he wants about 20 pounds of food per colony and the bees protected. For cellar wintering, 15 pounds will be sufficient.

PROF. N. W. McCLAIN says the raspberry possesses as much or more value to beekeepers than any other honey-producing plant. He is now stationed at the Minnesota Agricultural Experiment Station and says: "A quarter of a mile from this station a market-gardener has four acres of raspberries. These bushes continued to bloom for ten days, and during that time, with the exception of two or three rainy days, a continuous procession of bees could be observed going and returning to and from the apiary, and a fine showing of honey was made in the hives, and the honey was of superior quality."

Or honey produced from alfalfa. A. L. Root, in *Gleanings*, says: "The sample of alfalfa honey is not only the finest in appearance of any honey I ever saw in my life, but it is also equal in flavor. It is almost if not quite as clear as water, and yet during a hot July day it will scarcely run. It is as clear as a crystal, and exquisite in flavor. Very likely our friend has not a ton of such honey; but if he has, I should think it would be a small fortune if he could get it before the class of people who buy gilt-edge butter, and things of that sort. And by the way, we are using alfalfa honey on our table day after day. I never ate any other honey that suited so well, and for so good a length of time. At present the outlook seems to be that alfalfa honey is destined to lead the world."

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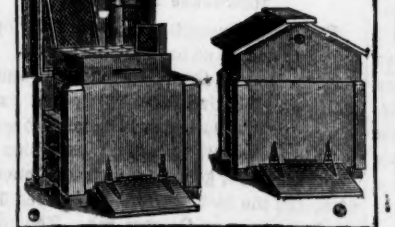
A Rich Brown or even black. It will not soil the pillow-case nor a pocket-handkerchief, and is always agreeable. All the dirty, gummy hair preparations should be displaced at once by Ayer's Hair Vigor, and thousands who go around with heads looking like the fretful porcupine should hurry to the nearest drug store and purchase a bottle of the Vigor.

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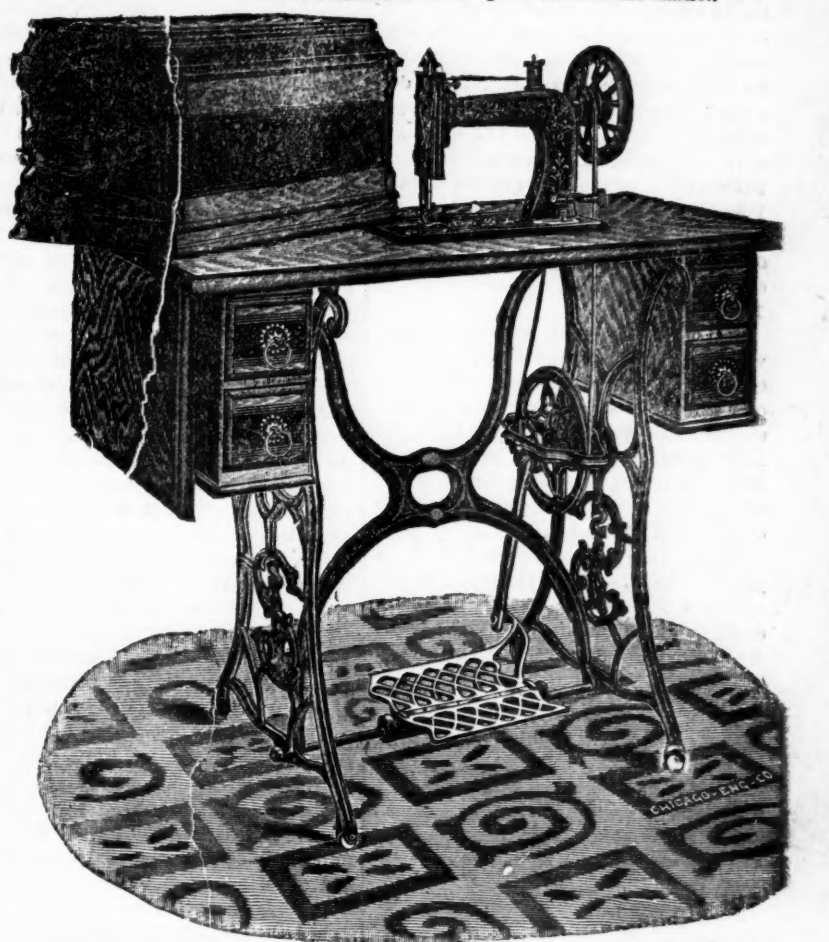
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DETROIT, SATURDAY, SEPT. 20, 1890.

This Paper is Entered at the Detroit Post-Office as second class matter.

WHEAT.

The receipts of wheat in this market the past week amounted to \$5,956 bu., against \$3,435 bu. the previous week, and 157,250 bu. for corresponding week in 1889. Shipments for the week were 159,806 bu. and 138,143 bu. the previous week, and 138,143 bu. the corresponding week last year. The stocks of wheat now held in this city amount to 549,445 bu., against 628,261 bu. last week, and 161,935 bu. at the corresponding date in 1889. The visible supply of this grain on Sept. 13 was 17,509,729 bu., against 17,500,301 bu. the previous week, and 15,097,436 bu. for the corresponding week in 1889. This shows an increase from the amount reported the previous week of 69,338 bushels. As compared with a year ago the visible supply shows an increase of 1,872,293 bu.

The market has been irregular the past week, moving up and down upon the slightest rumor. So far as we can see the decline of this week was not based upon any substantial foundation, and we look for a full recovery before many days. Yesterday the market was very quiet, owing to reports from other points of declining values, and lower prices.

The Chicago market closed 1½¢ lower than the previous day. St. Louis 1½¢, and New York 1½¢. In this market spot wheat was steady early, but closed weak, and the same as the previous day, and N. 1 white declining ½¢.

Futures were lower, the greatest loss being in December. Only a light business was done in either spot or futures.

The following table exhibits the daily closing sales of spot wheat in this market from Sept. 1st to Sept. 19th inclusive:

Sept. 1	No. 1	No. 2	No. 3
1	94 1/2	94 1/2	94 1/2
2	94 1/2	94 1/2	94 1/2
3	94 1/2	94 1/2	94 1/2
4	94 1/2	94 1/2	94 1/2
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The market has been irregular the past week, moving up and down upon the slightest rumor. So far as we can see the decline of this week was not based upon any substantial foundation, and we look for a full recovery before many days. Yesterday the market was very quiet, owing to reports from other points of declining values, and lower prices.

The Chicago market closed 1½¢ lower than the previous day. St. Louis 1½¢, and New York 1½¢. In this market spot wheat was steady early, but closed weak, and the same as the previous day, and N. 1 white declining ½¢.

Futures were lower, the greatest loss being in December. Only a light business was done in either spot or futures.

The following table exhibits the daily closing sales of spot wheat in this market from Sept. 1st to Sept. 19th inclusive:

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1	94 1/2	94 1/2	94 1/2
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Poetry.

THE BONNIE LAND O' BURNS.

The wild, sweet moors are all a feather,
With the sun and wind in the air,
A kiss to the face of the purple heather,
That blooms in every spot of weather,
In the bonnie land o' Burns.
But sweeter far than the hills or the heather
Is the face of my Elsie Gray!
Though her rosy cheeks are stained with the
Weather,
An' her little hands are as brown as leather
Wi' tolling the livelong day.
But she merrily sings at her work in the daytime,
An' her bread she cheerily earns,
As work in the garden of the May time—
Oh! her maiden life is one pleasant playtime
In the bonnie land o' Burns.
I passed her cot in the pleasant gloamin',
An' she sat in the open door,
While the last red beam o' sun went roaming
Over her sanded floor.
An' I paused and she blushed in furious fashion,
But proud an' angry she was,
With her gray blue Scottish eyes a-flashin'
As proud as proud could be—
An' she looked as grand as my Lady Mary
With her bosom nosegay o' ferns,
An' her cot was the castle an' she the fairy,
O' the magic land o' Burns!
"Come ben," she said, an' she tried to look
Gravely,
But the blush would burn meanwhile;
Though she met my eyes an' she did it bravely,
But she couldn't check the smile.
An' we sat at her door in the deepening gloam-
ing,
An' talked as the shadows chased
The beam o' day, an' the wind went roaming—
An' my arm stole round her waist.
An' I stole a fern, an' I stole two kisses—
A kiss an' a fern for my true love,
An' I did care for the loud wind's hisses,
It only carried our lovers' voices,
As it swept the land o' Burns.
The wild, free dunes were all a feather,
The day that we were wed,
An' Elsie's cheek was all a heather,
Sweet wi' the frolicsome kiss o' the weather
In her locks o' tawny red.
I stole a turf as we came frae the marriage—
A kiss an' a turf for my true love,
An' we were as grand, though we boasted no
Carriage,
As any twa in the land o' Burns!
She sits by me now, in her rocker o' rushes,
As here I sing her praise,
An' just as brightly her round cheek blushes
As it did in our honeymoon days.
—Lettie Virginia Douglas.

A COUNTRY COURTSHIP.

Driving the cows from the upper meadow—
Beauty and Brindle and Bess—
Now in the sunlight, now in the shadow,
And now in the wind's caress.
With song as sweet as at morn the starling
Is wont to the skies to trill;
Mollie, the farmer's daughter and darling,
Comes tripping down the hill.
Purple and black are the braided tresses
Her dainty temples that crown;
Light is her step on the sward it presses,
As fall of the thistle down.
The squirrels peck from the wayside hedges,
As the maiden moves along,
And count it chief of their privileges
To list to her jocund song.
Down where the alders and slender rushes
Border the rivulet's banks,
And the widened sweep of the water gushes
Under the bridge's broad planks;
Whistling a love song, in broken snatches—
His hat pushed back from his brows—
Robin, the miller, awaits and watches
For the coming of the cows.
Up to their knees in the stream, the cattle
Drink deep of the crystal flow;
Little they care for the lovers' prattle
Or the bliss the twain may know.
Their heaving sides with their draughts dis-
tended,
They enter the path again,
And crop the grasses, with heads low bended,
On either side of the lane.
The shadows deepen; the dew is sprinkling
With diamonds all the meads;
And faint and far, in the distance tinkling,
The sound of the bell recedes.
Still on the bridge where the water glistens,
As the moonlight on it falls,
The miller waits, and the maiden listens,
But the cows are in their stalls.
—W. D. Kelly, in Ladies' Home Journal.

Miscellaneous.

THE REVOLT OF "MOTHER"

BY MARY E. WILKINS.

"Father!"
"What is it?"
"What are them men diggin' over there in the field for?"
There was a sudden dropping and enlarging of the lower part of the old man's face, as if some heavy weight had settled there; he shut his mouth tight, and went on harnessing the great bay mare. He hustled the collar on to her neck with a jerk.
"Father!"
The old man slapped the saddle upon the mare's back.
"Look here, father, I want to know what them men are diggin' over in the field for, an' I'm goin' to know."
"I wish you'd go into the house, mother, an' tend to your own affairs," the old man then said. He ran his words together and his speech was almost as inarticulate as a growl.
But the woman understood! It was her most native tongue. "I ain't goin' into the house till you tell me what them men are doin' over there in the field," she said.
Then she stood waiting. She was a small woman, short and straight-waisted like a child in her brown cotton gown. Her forehead was mild and benevolent from the smooth curves of gray hair; there were meek downward lines about her nose and mouth, but her eyes, fixed upon the old man, looked as if the meekness had been the result of her own will, never the will of another.
They were in the barn, standing before the wide open doors. The spring air, full of the smell of growing grass and unseen blossoms, came in their faces. The deep yard in front was littered with farm wagons and piles of wood; on the edges, close to the fence and the house, the grass was a vivid green, and there were some dandelions.
The old man glanced doggedly at his wife as he tightened the last buckle on the harness. She looked as immovable to him as one of the rocks in his pasture-land, bound to the earth with generations of blackberry

vines. He slapped the reins over the horse, and started forth from the barn.
"Father!" said she.
The old man pulled up. "What is it?"
"I want to know what them men are diggin' over there in that field for."
"They're diggin' a cellar, I s'pose, if you've got to know."
"A cellar for what?"
"A barn."
"A barn? You ain't goin' to build a barn over there where we was goin' to have a house, father?"
The old man said not another word. He hurried the horse into the farm wagon, and clattered out of the yard, jouncing as sturdily on his seat as a boy.
The woman stood a moment looking after him, then she went out of the barn across a corner of the yard to the house. The house, standing at right angles with the great barn and a long reach of sheds and out-buildings, was infinitesimal compared with them. It was scarcely as commodious for people as the little boxes under the barn eaves were for doves.
A pretty girl's face, pink and delicate as a flower, was looking out of one of the house windows. She was watching three men who were digging over in the field which bounded the yard near the road line. She turned quietly when the woman entered.
"What are they diggin' for, mother?" said she. "Did he tell you?"
"They're diggin' for—a cellar for a new barn."
"Oh, mother, he ain't goin' to build another barn?"
"That's what he says."
A boy stood before the kitchen glass combing his hair. He combed slowly and painstakingly, arranging his brown hair in a smooth hillcock over his forehead. He did not seem to pay any attention to the conversation.
"Sammy, did you know father was goin' to build a new barn?" asked the girl.
The boy combed assiduously.
"Sammy!"
He turned and showed a face like his father's under his smooth crest of hair.
"Yes, I s'pose I did," he said, reluctantly.
"How long have you known it?" asked his mother.
"Bout three months, I guess."
"Why didn't you tell of it?"
"I didn't think 't would do no good."
"I don't see what father wants another barn for," said the girl, in her sweet, slow voice. She turned again to the window, and stared out at the digging men in the field. Her tender sweet face was full of a gentle distress. Her forehead was bald and innocent as a baby's, with the light hair strained back from it in a row of curl-papers. She was quite large, but her soft curves did not look as if they covered muscles.
Her mother looked sternly at the boy. "Is he goin' to buy more cows?" said she.
The boy did not reply; he was tying his shoes.
"Sammy, I want you to tell me if he's goin' to buy more cows," said she.
"I s'pose he is."
"How many?"
"Four, I guess."
His mother said nothing more. She went into the pantry, and there was a clatter of dishes. The boy got his cap from a nail behind the door, took an old arithmetic from the shelf, and started for school. He was lightly built but clumsy. He went out of the yard with a curious spring in the hips, that made his loose home-made jacket tilt up in the rear.
The girl went to the sink, and began to wash the dishes that were piled up there. Her mother came promptly out of the pantry, and shoved her aside. "You wipe 'em," said she; "I'll wash. There's a good many this mornin'!"
The mother plunged her hands vigorously into the water, the girl wiped the plates slowly and dreamily. "Mother," said she, "don't you think it's too bad father's goin' to build that new barn, much as we need a decent house to live in?"
Her mother scrubbed a dish fiercely. "You ain't found out yet we're washin' folks, Nanny Penn," said she. "You ain't seen enough of men-folks yet to. One of these days you'll find it out, an' then you'll know that we know only what men-folks think we do, so far as any use of it goes, an' how we'd ought to reckon men-folks in with Providence, an' not complain of what they do any more than we do of the weather."
"I don't care; I don't believe George is anything like that, anyhow," said Nanny. Her delicate face flushed pink, her lips pointed softly, as if she were going to cry.
"You wait an' see. I guess George Eastman ain't no better than any other men. You hadn't ought to judge father, though. He can't help it, 'cause he don't look at things like the way we do. An' we've been pretty comfortable here, after all. The roof don't leak—ain't never but once—that's one thing. Father kept it shined right up."
"I do wish we had a parlor."
"I guess it won't hurt George Eastman any to come to see you in a nice clean kitchen. I guess a good many girls don't have as good a place as this. Nobody's ever heard me complain."
"I ain't complained either, mother."
"Well, I don't think you'd better, a good father, an' a good home as you've got. S'pose your father made you go out an' work for your livin'! Lots of girls have to that; ain't no stronger an' better able to than you be."
Sarah Penn washed the frying-pan with a conclusive air. She scrubbed the outside of it as faithfully as the inside. She was a masterly keeper of her box of a house. Her one living-room never seemed to have in it any of the dust which the friction of life with inanimate matter produces. She swept, and there seemed to be no dirt to go before the broom; she cleaned, and one could see no difference. She was like an artist so perfect that he has apparently no art. To-day she got out a mixing bowl and a board, and rolled some pie, and there was no more door upon her than upon her daughter who was doing finer work. Nanny was to be married in the fall, and she was sewing on some white cambric and embroidery. She sewed industriously while her mother cooked, her soft milk-white hands and wrists showed whiter than her delicate work.
"We must have the stove moved out in the shed before long," said Mrs. Penn.

"Talk about not havin' things, it's been a real blessin' to be able to put a stove in that shed in hot weather. Father did one good thing when he fixed that stove-pipe out there."
Sarah Penn's face as she rolled her pie had that expression of meek vigor which might have characterized one of the New Testament saints. She was making mince-pies. Her husband, Adoniram Penn, liked them better than any other kind. She baked twice a week. Adoniram often liked a piece of pie between meals. She hurried this morning. It had been later than usual when she began, and she wanted to have a pie baked for dinner. However deep a resentment she might be forced to hold against her husband, she would never fall in sedulous attention to his wants.
Nobility of character manifests itself at loopholes when it is not provided with large doors. Sarah Penn's showed itself today in flaky dishes of pastry. So she made the pie faithfully, while across the table she could see, when she glanced up from her work, the sight that rankled in her patient and steadfast soul—the digging of the cellar for the new barn in the place where Adoniram forty years ago had promised her their new home should stand.
The pies were done for dinner. Adoniram and Sammy were home a few minutes after twelve o'clock. The dinner was eaten with serious haste. There was never much conversation at the table in the Penn family. Adoniram asked a blessing, and they ate promptly, then rose up and went about their work.
Sammy went back to school, taking softly the door of the yard like a rabbit. He played a game of marbles before school, and feared his father would give him some chores to do. Adoniram hastened to the door and called after him, but he was out of sight.
"I don't see what you let him go for, mother," said he. "I wanted him to help unload that wood."
Adoniram went to work out in the yard unloading wood from the wagon. Sarah put away the dinner dishes, while Nanny took down her curl-papers and changed her dress. She was going down to the store to buy some embroidery and thread.
When Nanny was gone, Mrs. Penn went to the door. "Father!" she called.
"Well, what is it?"
"I want to see you just a minute, father."
"I can't leave this wood minute. I've got to get it unloaded an' go for a load of gravel before two o'clock. Sammy had ought to help me. You hadn't ought to let him go to school so early."
"I want to see you just a minute."
"I tell you I can't, nohow, mother."
"Father, you come here." Sarah Penn stood in the door like a queen; she held her head as if it bore a crown; there was that patience which makes authority royal in her voice. Adoniram went.
Mrs. Penn led the way into the kitchen, and pointed to a chair. "Sit down, father," she said; "I've got somethin' I want to say to you."
He sat down heavily; his face was quite stolid, but he looked at her with restive eyes. "Well, what is it, mother?"
"I want to know what you're buildin' that new barn for, father?"
"I ain't got nothing to say about it."
"I tell you I ain't got nothin' to say about it, mother; an' I ain't got nothin' to say nothin'." "Be you goin' to buy more cows?" Adoniram did not reply; he shut his mouth tight.
"I know you be, as well as I want to. Now, father, look here!"—Sarah Penn had not sat down; she stood before her husband in the humble fashion of a Scripture woman. "I'm goin' to talk real plain to you; I never have since I married you, but I'm goin' to now. I ain't never complained, an' I ain't goin' to complain now, but I'm goin' to talk plain. You see this room here, father; you look at it well. You see there ain't no carpet on the floor, an' you see the paper is all dirty, an' the droppin' off the walls. We ain't had no new paper on it for ten years, an' then I put it on myself, an' it didn't cost but nine-pence a roll. You see this room, father; it's all the one I've had to work in an' eat in an' sit in since we was married. There ain't another woman in the whole town whose husband ain't got half the means you have but what's got better. It's all the room Nanny's got to have her company in; an' there ain't one of her mates but what's got better, an' their fathers not so able as hers is. It's all the room she'll have to be married in. What would you have thought, father, if we had had our wedding in a room no better than this? I was married in my mother's parlor, with a carpet on the floor, an' stuffed furniture, an' a mahogany card-table. An' this is all the room my daughter will have to be married in. Look here, father!"
Sarah Penn went across the room as though it were a fragile stage. She flung open a door and disclosed a tiny bedroom, only large enough for a bed and bureau, with a path between. "There, father," said she—"there's all the room I've had to sleep in for forty years. All my children were born there—the two that died, an' the two that's livin'. I was sick with a fever there."
She stepped to another door and opened it. It led into a small, ill-lighted pantry. "Here," said she, "is all the buttery I've got—every place I've got for my dishes, to set away my victuals in, an' to keep my milk-pans in. Father, I've been takin' care of the milk of six cows in this place, an' now you're goin' to build a new barn, an' keep more cows, an' give me more to do in it."
She threw open another door. A narrow crooked flight of stairs wound upward from it. "There, father," said she; "I want you to look at the stairs that go up to them places our son an' daughter have to sleep in all their lives. There ain't a prettier girl in town nor a more ladylike one than Nanny, an' that's the place she has to sleep in. It ain't so good as your horse's stall; it ain't so warm an' tight."
Sarah Penn went back and stood before her husband. "Now, father," said she, "I want to know if you think you're doin' right an' accordin' to what you profess. Here, when we was married, forty years ago, you promised me faithfully that we should have a new house built in that lot over in the field before the year was out. You said

you had money enough, an' you wouldn't ask me to live in no such place as this. It is forty years now, an' you've been makin' more money, an' I've been savin' of it for you ever since, an' you ain't built no house yet. You've built sheds an' cow-houses an' one new barn, an' now you're goin' to build another. Father, I want to know if you think it's right. You're lodgin' your dumb beasts better than you are your own flesh an' blood. I want to know if you think it's right."
"I ain't got nothin' to say."
"You can't say nothin' without ownin' it ain't right, father. An' there's another thing—I ain't complained; I've got along forty years, an' I s'pose I should forty more, if it wa'n't for that—if we don't have another house, Nanny she can't live with us after she's married. She'll have to go somewhere else to live away from us, an' it don't seem as if I could have it so, no ways, father. She wa'n't ever strong. She's got considerable color, but there wa'n't no backbone to her. I've always took the best of everything off her, an' she ain't fit to keep house and do everything herself. She'll be all worn out inside of a year. Think of her doin' all the washin' and ironin' an' bakin' with them soft white hands an' arms, an' sweepin'! I can't have it so, no ways, father."
Mrs. Penn's face was burning; her mild eyes gleamed. She had pleaded her little cause like a Webster; she had ranged from severity to pathos; but her opponent employed that obstinate silence which makes eloquence futile with mocking echoes. Adoniram arose clumtily.
"Father, ain't you got nothin' to say?" said Mrs. Penn.
"I've got to go off after that load of gravel. I can't stand here talkin' all day."
"Father, won't you think it over, an' have a house built up there instead of a barn?"
"I ain't got nothin' to say."
(To be continued.)

A First Experience.
Mrs. Filter and both grandmothers and all the great aunts have gone, and Mr. and Mrs. Charles Verdant are to spend their first night alone with their first-born, a lusty youth now five weeks old. Mr. and Mrs. Charles are nervous and anxious. The baby is serenely indifferent, and wholly non-committal as to the programme he has mapped out for himself.
"What if anything should happen?" says Mrs. Charles, for the nineteenth time, as she and Charles lie down for the night, but not "in peace to sleep."
"Oh, I guess he'll be all right," says Charles.
"You have everything where you can put your hand right on it at a moment's notice."
"Yes, dear."
"The catnip in case of colic, you know?"
"Yes, dear."
"And his food for the night all ready?"
"Yes, it's all right."
"I wonder if there's alcohol enough in the spirit lamp to last all night?"
"Oh, yes; it's full."
"Oh, dear, I don't believe I left his bottle full of soda and water, and it must be kept so to keep it sweet, mamma said. Do get up and see."
Charles gets up and finds the bottle all right. He lies down wearily. Silence for ten minutes.
"Charles, did mamma and the nurse say that the milk should be two-thirds or three-fourths water? I'm so afraid I've made a mistake. I've got it written down some place. Do get up and see. It's on a piece of paper in the left-hand small drawer of the bureau. I wouldn't make a mistake about his food for the world. It might ruin his precious little stomach."
Charles reports that the milk should be about two-thirds water until baby is about five or six weeks old.
"What if he should have the cramp?" asked Mrs. Charles, with a gasp, at eleven.
"Babies of his age don't have cramp."
"Are you sure?"
"Nurse said so."
"Oh, I'm so glad. But, oh dear, if he should have a spasm!"
"I guess he won't."
"How can you speak so calmly about it? I should go wild if he did."
At 11:30 Charles begins his first nap. At 11:35 his wife asks anxiously—
"O Charles, do you think he's breathing all right?"
Charles' ear is held over baby's red and wrinkled little mouth.
"Why, yes; I feel quite sure."
"It seemed to me that he wasn't, and I was so worried. Charles Verdant, I should die if anything should happen to this baby. Do you think the room is warm enough? Do get up and look at the thermometer. Babyhood says the temperature should not be less than 50 for a young baby."
"It's just 54," says Charles, as he stands enveloped in a blanket, night-lamp in hand, before the thermometer.
"See what time it is."
"Fifteen minutes until twelve."
"He must have his bottle at twelve. We might as well get up now so as to give ourselves plenty of time to get it ready carefully. Bring in the milk. I do wonder if the milkman does bring us milk from one cow. Baby must not have mixed milk."
At precisely twelve o'clock the inviting looking rubber cap on baby's bottle is slipped between his ears, and Charles drops down wearily.
"Mercy! Charles Verdant, you almost rolled on the baby! I'm so afraid you will roll on him some night and kill him! Such things have happened. Why doesn't he take his dinner?"
"I wonder, I guess."
"I don't see if he's well? Do bring the lamp."
Charles brings the lamp.
"What makes him twitch his mouth and wrinkle up his brow like that?"
"Oh, babies do, I guess."
"I don't believe it. O Charles, shouldn't you go for mamma?"
"No, no, dear; he's all right."
"O, I'm afraid he isn't! We'd never forgive ourselves if anything happened to him. You'd better go for mamma" (who lives three miles away).
"It's nothing but a little griping in his stomach!"
"Oh, the poor, poor, little precious darling! Does his own little tumbliek hurt

him? Mamma won't let it hurt him—the naughty, naughty pain! Charles, get up and warm that catnip and light the fire in the range, and heat his flannel shawl hot, and be ready to go for mamma and the doctor at a moment's notice! I am so worried. You had better get Bridget up. Bring me the powder box and two small and one large safety pins. Light the gas. Look at the thermometer again. Only 49. Go right down and shake up the furnace. Don't take your eye off the baby for an instant while I dress."
The gray dawn of the morning finds Mr. and Mrs. Verdant and Bridget hovering over the kitchen range. They have been hovering there most of the night. But one person in that anxious household has slept sweetly and peacefully, and that person is—the baby.
The Death of Gen. Custer.
Never realizing, as I believe, the fearful odds against him, believing that he would find the village "on the run" and that between himself and Reno he could "double them up" in short order, Custer had jauntily trotted down to his death. It was a long five mile ride from where he sighted the northern end of the village to where he struck its center around that bold point of bluff, and from the start to the moment his gauds whirled into view, and his troops came galloping "front to line" down near the ford, he never fairly saw the great village—never dreamed of its depth and extent. Rounding the bluff, he suddenly found himself face to face with thousands of the boldest and most skillful warriors of the prairies. He had hoped to charge at once into the heart of the village, to hear the cheers of Reno's men from the south. Instead he was greeted with a perfect fury of flame and hissing lead from the dense thickets of willow and cottonwood, a fire that had to be answered at once. Quickly he dismounted his men and threw them forward on the run, each fourth man holding, cavalry fashion, the horses of the other three. The line seems to have swept in parallel very nearly with the general course of the stream, but to no purpose. The foe was ten to one in their front. Boys and squaws were shooting from the willows ("Oh, we had plenty guns!" said our story tellers); and worse than that, hundreds of young warriors had mounted their ponies and swarmed across the stream below him, hundreds more were following and circling all about him.
And then it was that Custer, the hero of a hundred daring charges, seems to have realized that he must cut his way out. "Mount!" rang the trumpets, and, leaving many a poor fellow on the ground, the troopers ran for their horses. Instantly from lodge and willow Oxalises and Brules sprang to horse and rushed to the ford in mad pursuit. "Make for the heights!" must have been the order, for the first rush was eastward; then more to the left as they reached higher ground, all they could see, far as they could see, circling, swooping, yelling like demons, and the time keeping up their furious fire, were thousands of the mounted Sioux. Hemmed in, cut off, dropping fast from their saddles, Custer's men saw that retreat was impossible. They sprang to the ground, "turned their horses loose," said the Indians, and by that time half their number had fallen. A skirmish line was thrown out down the slope, and there they dropped at five yards' interval; their comrades found them two days after. Every instant the foe rode closer and gained in numbers; every instant some poor fellow bit the dust. At last, on a mound that stands at the northern end of a little ridge, Custer, with Cook, Yates and gallant "Brother Tom" and some dozen soldiers, all that were left by this time, gathered in the last rally. They told their lives dearly, brave fellows that they were; but they were as a dozen to the leaves of the forest at the end of twenty minutes, and in less than twenty-five—all was over.

Churches in London.
There is an uncommon number of churches in London; they are marvelously common objects. They are almost all stone, and called up with granite posts and iron fences: Two things about the Episcopal churches (which are in the majority) strike an American as peculiar. One is that fire apparatus is often stored in the little inclosures, so that against a dingy church wall you see a bright red ladder or a flaming tool or horse cart. The red ladders are on wheels. Church-yards are sometimes regular fire stations, and in such cases a red lantern is hung on the railing at night with the words "Fire Station" glaring in its lighted front. The other peculiar thing about the churches is that public notices and placards are posted on the doors and railings. There you read the tax ratings for the parish, and that marriage licenses are obtainable somewhere on the premises, and that men are wanted for the army, and stokers will get good pay in the navy. In these notices the branch of the public service that calls for recruits usually poses a colored picture of the uniform of that wing of the service, chromos that are intended to look very alluring. We Americans are reminded by the treatment of the houses of worship that perhaps it was not so strange, after all, for the British to use the churches in New York and Boston for garisons and prisons, and whatever else they needed them for during the revolutionary war. Where Church and State are joined, the State puts the meeting-houses to its own uses.—Julian Ralph, in Harper's Weekly.

BURLINGTON ROUTE.
But One Night, Chicago to Denver.
"The Burlington's Number One" daily vestibule express leaves Chicago at 1:00 P.M. and arrives at Denver at 6:30 P.M. the next day. Quicker time than by any other route. Direct connection with this train from Peoria. Additional express trains, making as quick time as those of any other road, from Chicago, St. Louis and Peoria to St. Paul, Minneapolis, Council Bluffs, Omaha, Cheyenne, Denver, Atchinson, Kansas City, Houston and all points West, Southwest and Northwest.
Eastern Visitor—Great Scott! Look at that enormous green snake! See him wiggle. Guess I won't invest in any land in this section. California Land Agent—Stranger, I kin pity your ignorance, but that ain't no snake, it's a pumpkin vine I planted this mornin' just beginnin' to grow.

THE RUSSIAN PRINCESS.
A Poor Little Offshoot of Royalty Reduced to Abject Poverty.
"When we first met her she was living in the Hotel Bristol—a pretty, aristocratic little lady, a trifle too fair, with curly white hair, pale blue eyes, and a beautiful, clear complexion. Some people said she was a Russian spy, but she maintained that she was a Russian Princess, and insisted on being addressed as 'Your Excellency.' Thus writes a Paris correspondent of the Pall Mall Gazette. "We have a notion at home that Russian Princesses abound like blackberries in the month of September. It appears that Russians hold a different opinion; but that is a detail. So our aristocratic little lady had no difficulty in getting herself addressed as 'Your Excellency,' and spoken of seriously as the Russian Princess, yet I doubt if any of us believed in her higher rank. She was very extravagant and generous, had a lady's maid, a man of affairs, and a lady's companion, and she occupied a flat on the first floor. This means a considerable income.
"One day she announced her intention of visiting St. Petersburg. It was whispered that she was connected mysteriously with an august person in that capital. This was accepted in the same skeptical spirit as we did her rank of Princess and her hinted assertion that high quarters in St. Petersburg would be flattered by her appearance. The fact is that we had grown into the way of disbelieving her pretty and romantic fairy tales, wherein sovereigns and courtiers and diplomats, counts and palaces and embassies figured largely.
"So we continued to wink and smile, and wait her wishes for a bon voyage and a pleasant return as she drove away from the Hotel Bristol with her companion, her maid and her homme d'affaires, followed by the very sincere regrets of all the menials of that aristocratic establishment. Judge, then, our complete dismay to learn in a couple of months that our charming little Russian lady had been flung into a mad-house—yes, a mad-house! she and her poor lady's companion. She might have had a few harmless eccentricities and delusions upon her birth. But if we are all to suffer imprisonment for the sake of an innocent delusion, good gracious! would the world hold together? We made inquiries at the Russian Embassy, for we were honestly attached to the pretty little creature. We were either not by mysterious silence or by haughty refusal to listen to us. At last we thought ourselves of the English Embassy, remembering the English companion. And here we learned that our curly-headed Princess was not so much astray as we had imagined. Unfortunately for herself the claim was oblique. She was the daughter of a late august person, during whose life she had been brought up at court; hence her girl mention of courtiers and ambassadors. Upon his death the next august person allowed her a splendid pension as a sort of recognition of her as a step-sister, but exiled her to Paris. Her father in the world's eyes was an illustrious Russian General who had lately died, leaving her a large fortune.
"Now, just at that moment the powerful person to whom she owed her pension was prematurely called away. As a pensioner she looked up to the English companion, and some months elapsed before she was able to get the ear of the English Embassy. The English Ambassador rescued her and paid her fare down to Paris, and that was how we learned the story. Through the English Government, or as my little Princess will have it, the personal friendly efforts of a very illustrious personage, she was at the end of nine awful months liberated, enfeebled in health and deprived of her pension. She was conducted to Brussels, thence forcibly conveyed to Paris, and, as a preventive against further voyage, the poor lady has been deprived of her father's fortune, left to her, as well as her pension.
"She is dressed in rags, almost, in delicate health, unable in sickness to have a doctor to attend to her because she can not afford to pay for food, wines or medicines, or any comforts. She lives in a cheap pension on the fifth floor in most deplorable circumstances—an inflexible, gentle, well-born lady, used all her life to luxury and unlimited attendance. Hating Paris, she is forced to remain here, and not willing to believe that it is her own country that has done her this vile wrong because of her birth, she persists in believing that the President of the French Republic receives her pension and pockets it to keep the Republic going."

MISS MATTIE'S RUDE.
How a Servant Entertained Guests Until the Bread Came.
A lady from Kansas, who was visiting a family on Walnut street, West Philadelphia, a week or more ago, told a Press reporter a wonderfully clever story of a woman's wit.
When my husband was a candidate for the State Senate we lived on a farm two miles from our nearest neighbor and four miles from town. One day just as we were sitting down to dinner a wagon drove up containing four of my husband's political friends. They were influential and expected to dine with us. My husband's Irish maid, who lived with us, informed me as we had all assembled that there was just bread enough for our own dinner, and there was no flour in the house for biscuits. Here was a terrible and unusual quandary. Four able-bodied men and only bread enough for two of them. Only a woman with her husband's interests at stake can appreciate my feelings. I called my oldest son out of the room, put him on a horse, with a bag over his arm, and told him to ride on a gallop to Mrs. B.—s, our nearest neighbor, and borrow all the bread she had, explaining my predicament. As Bob rode away my servant, Mattie, said: "Sure, ma'am, the bread will all be gone entirely before the lad reaches B.—s. But just leave it till me," she added with a grin. "Don't worry yer swate sowl about that; we'll have it in time."
I went back to the dining-room and my heart dropped as I saw that only four or five slices of bread were left on the plate, though there was an abundance of meat and vegetables. Suddenly Mattie's head was stuck in the door, and in a voice of consternation, with terror

written on her face, she fairly yelled: "Plaze, ma'am, the eatable's on fire!" In an instant the dining-room was deserted. Our guests sprang to their feet, and, headed by my husband, rushed from the room. Sure enough, there were volumes of bluish smoke pouring out of the stable door and through the cracks in the boards. There was a frantic rush for water buckets and a frantic, a long chase out to the barn. But some of water and had the fire nearly extinguished by the time the others arrived. It took fifteen minutes to get order restored, and by that time Bob had arrived with the bread. Mattie had started the fire in an old vinegar barrel with some straw. It was a risky piece of business, I thought, until she sharply witted girl told me that she had damped the straw so that it would make a heavy smoke, and afterward had covered the barrel with pieces of loose boards thoroughly damped.
AN AUTOCART HUMBLED.
How a Quiet Young Man Brought a Buck Teller to Time.
The autocratic paying teller of a New York street bank had an unpleasant experience one day last week, says the New York Tribune. A tall young man with whiskers trimmed as though they had been laid out by a landscape painter, dener hurried up to the window and presented a check for \$250.
"Please let me have it in—" he began.
"Give your own business," snapped the red-headed autocrat within. "I'll give you what is convenient." "The teller told the money handed him and started away. In a moment he returned. "You've made a mistake," he said, mildly.
"Not responsible for any mistake," the paying teller, sharply.
"But you—"
"We have no corrections; more or less, give your own business." "Oh, very well," said the tall young man, cheerfully, waving a bill at the grating. "I was only going to tell you I had given me \$50 too much, but you can stand it if you can," he added, he turned away.
The change that came over the red-headed teller was extraordinary.
"Hey there, hold on," he called.
"Mind your own business; I shall give you what is convenient." "The teller told the money handed him and started away. In a moment he returned. "You've made a mistake," he said, mildly.
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THE WEBSTER FARMERS' CLUB.

After a two months' vacation this club again met at the pleasant home of our president, G. W. Merrill, on Saturday, Sept. 15th. All seemed glad of an opportunity to again meet and discuss matters of importance to farmers.

The meeting was called to order by President Merrill and some preliminary business transacted, after which Mrs. Wm. Scadin read a poem of her own composition which was considered well worthy a place in the Household of the Michigan Farmer, and its publication was unanimously requested by the club.

Wm. E. Stocking, of Lima, gave an interesting talk of a half hour or more. He spoke earnestly in favor of farmers organizing to protect their rights. The influence of the Grange and the many other farmers' organizations is being felt. The country's clubs that are being organized all over the country are a step in the right direction. All other classes of business combine to promote and protect their interests. We as farmers must do the same.

After Mr. Stocking's remarks, a general and earnest discussion took place which showed that the farmers are alive to these questions of importance to them.

For several years past this club has held a fair in connection with its October meeting. This year it was voted to hold an exposition at the next meeting, which will be the second Saturday in October, at the spacious home of Johnson Backus, in the township of Webster.

R. S. CUSHMAN, Cor. Sec.

Cows belonging to some of the city milk dealers have been dying of Texas fever during the past month. It is believed the regulations relative to the driving of Texas cattle through the city have been disregarded.

The Dairy.

Keeping Quality of Cheese.

The cheese trade of the present period presents different phases than it used to, some of which we will consider. The maker of the past had to produce stock possessed of long keeping qualities, at least that was his aim, though in the endeavor to use a modern slang expression, he often "got left." In youth the writer's associations were linked with cheese and cheese making, and we can often remember of following afar off the August cheese buyer of the period who, robed in a long linen duster, would ride up to the factory once a month or so, and with an air of profound wisdom, go in to inspect the cheese. They lay on pine counters, long yellow rows numbered by the many hundred, the accumulation of a least two months' manufacture. Despite precautions the crucial heat of mid-summer had laid its hand heavily on many of the oldest, and the buyer complains of "off flavor," a few cracks and crevices have escaped the eye of the busy maker, and the gentleman in linen detects evidence of skippers. Then he takes another general survey of the stock and buttons-hole the proprietor one side to make an offer. He is working for a New York commission and shipping house, and his actions are controlled by their telegrams. If the salesman is shrewd, perhaps there is a long time consumed in striking a bargain, or perhaps no sale is consummated at all, and another buyer with different figures gets the lot a week or a fortnight hence. That's the way it once was, but now times are different. If the factory men then had facilities for placing their cured cheese in cold storage large financial losses might have been averted and general quality kept on a higher plane. The way it is now with regular weekly shipments from the factory, and but few cheese held on the shelves of greater age than fifteen or twenty days, keeping quality is not made a prime object with the average maker. Is this always the course of wisdom? We think not, and will state our reasons. In order to get a cheese ready for market in from twelve to fourteen days from the hoop a large amount of rennet must be used to quickly coagulate the milk; but a slight trace of acid must be tolerated or the cheese will be too much firmness to overcome, and for the same reason salt is used in sparing proportion. The result is that the activity of the rennet unimpaired by acid or salt soon mellows the cheese into edible quality, which if quickly consumed answers all purposes, but if not used by its future flavor, for it possesses no stable foundation to stand upon. Even with a ready market makers should always be careful not to carry this subject of quick maturity to an extreme; rather keep on the safe side and be conservative in this line. Superiors with no real practical knowledge have no right to dominate to make the standard they are to go by in cheese making. A good cheese maker ought to comprehend the requisites of turning out a perfect article without detraction from men with superficial trade knowledge; if not, he is not fit to work over a vat. Beware of keeping a thoroughly cured cheese in a high temperature. Cold storage is the place for it.—Geo. E. Newell, in Dairy Notes.

Dairy Notes.

LAST week the East Otto, Springfield and Cloverfield combination cheese factories of Western New York sold their August make at 9 1/2c.

G. P. Goodrich, at a Wisconsin Institute, said: "I think as good a grain ration as you can get for cows is one-third bran, one-third ground oats, and one-third corn-meal, all by weight, about 12 to 14 pounds to each cow daily."

Mr. HERRINGTON, an experienced dairyman, says cotton seed meal will never do for feed if pure meal is expected to be made. There will be a taste about the butter that's disagreeable. Good clover or alfalfa hay, he says, with bran, cornmeal and sugar beets, will be good enough. There is nothing better.

AFTER speaking hopefully of the prospect for September cheese the Utica Herald says: "Meanwhile, there is some uncertainty about August stock. It had to encounter some very hot weather, and buyers seem rather insecure as to its keeping qualities. Home trade has thus far taken quite freely, regarding it as a good quality article."

something like 90c, and with the prospect that September stock will sell at least 10 or more higher. Indeed this is the basis for present market prices, as shippers would not have consented to such rates if they had not been forced to it.

Veterinary Department.

Conducted by Prof. Robert Jennings, Veterinary Surgeon. Professional advice through the columns of the Michigan Farmer to all regular subscribers of the paper. The full name and address will be necessary that we may identify them as subscribers. The symptoms should be accurately described to ensure correct treatment. No questions answered gratuitously by mail unless accompanied by a fee of one dollar. Private address, No. 201 First St. Detroit, Mich.

Estus Ovis or Sheep Bot, Grub in the Head.

Postpaid, Sept. 12, 1890.

Veterinary Editor of the Michigan Farmer.

I would like to inquire through the columns of your paper if sheep are liable to die at this time of the year from grub in the head? Now I have buried seven lately, six lambs, two yearlings, a ram, a Shropshire, and they were in the very best condition. Now they would stand and throw their head back and rear up, they were in such pain. I opened the heads of two of them and found the grub head in the nostrils just under the eye. Now there were several more that were affected, and what I want to do is tell you how I served them and I did not lose any more. I took and scattered slaked lime on the stable floor and drove them through it at four different times, and it would set them sneezing and I think they got rid of the grub in that way. Now as to the cause: I think they stood under a shade tree until it got very foul and perhaps there was the fly harbored that done the mischief. They had access to a plowed field, but that was wet all the time so no dust would rise from it. Hoping this may benefit some of your readers that may be troubled the same way.

SUBSCRIBER.

Answer.—The grub you describe is the larva of the ovis ovis or gad fly of sheep.

The presence of these grubs are a great annoyance to the animal when on their march up the nostrils to the frontal sinuses; where they are found in the spring of the year fully developed grubs. Their presence is always indicated by excitement and alarm; the sheep collect in groups, with their heads turned inwards and their noses close to the ground or poked into any loose dirt within their reach, affording temporary protection from an attack of their common enemy. The eggs of the fly are deposited upon the margin of the nostrils, where they are hatched by the warmth of parts; they then commence their journey up the nostrils and locate in the frontal sinuses, where they are developed during the winter months. We have never known of these grubs doing any injury at this season of the year.

Commercial.

DETROIT WHOLESALE MARKET.

DETROIT, September 20, 1890.

WHEAT.—Market quiet. Minner's patents are higher, and prices are lower. No other changes. Quotations on car lots are as follows:

Michigan roller process..... 4 65 @ 4 75

Minnesota, patents..... 4 65 @ 4 75

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further drop, there being free offers yesterday at 11 7/8c per bbl.

POULTRY.—The following prices were paid yesterday at the Patis market, 301 Woodward Avenue: Poultry, 8c; chickens, 10c; young ducks, 9c; old ducks, 8c; turkeys, 11c; spring turkeys, weighing 4 lbs., 13 1/2c; 5 lbs., 15c; 6 lbs., 16c; 7 lbs., 17c; 8 lbs., 18c; 9 lbs., 19c; 10 lbs., 20c; 11 lbs., 21c; 12 lbs., 22c; 13 lbs., 23c; 14 lbs., 24c; 15 lbs., 25c; 16 lbs., 26c; 17 lbs., 27c; 18 lbs., 28c; 19 lbs., 29c; 20 lbs., 30c; 21 lbs., 31c; 22 lbs., 32c; 23 lbs., 33c; 24 lbs., 34c; 25 lbs., 35c; 26 lbs., 36c; 27 lbs., 37c; 28 lbs., 38c; 29 lbs., 39c; 30 lbs., 40c; 31 lbs., 41c; 32 lbs., 42c; 33 lbs., 43c; 34 lbs., 44c; 35 lbs., 45c; 36 lbs., 46c; 37 lbs., 47c; 38 lbs., 48c; 39 lbs., 49c; 40 lbs., 50c; 41 lbs., 51c; 42 lbs., 52c; 43 lbs., 53c; 44 lbs., 54c; 45 lbs., 55c; 46 lbs., 56c; 47 lbs., 57c; 48 lbs., 58c; 49 lbs., 59c; 50 lbs., 60c; 51 lbs., 61c; 52 lbs., 62c; 53 lbs., 63c; 54 lbs., 64c; 55 lbs., 65c; 56 lbs., 66c; 57 lbs., 67c; 58 lbs., 68c; 59 lbs., 69c; 60 lbs., 70c; 61 lbs., 71c; 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